

PUBLIC LIBRARIES. By HENRY T. HARE [F.] and JAMES DUFF BROWN
(Chief Librarian, Islington Public Libraries).

I.—SOME SUGGESTIONS FOR A SIMPLE ARCHITECTURAL PLAN.

By HENRY T. HARE.

SO much has been written and said on the subject of public libraries that one may well be justified in concluding that the subject has been worn somewhat threadbare. Many very excellent Papers have been read, both in this room and in other places, which have dealt with them in a more or less exhaustive manner; and I doubt whether I shall be able to bring forward any views which have the merit of novelty, or which will assist in advancing our ideas on the subject.

The public library has been one of our most familiar problems for many years, and has been the occasion for many competitions, in which large numbers of the profession have taken part; and one might have reasonably expected that, with so much effort concentrated on a comparatively simple subject, some very notable results would have been achieved; that some very brilliant type of plan or design would have been evolved. Such, however, does not appear to have been the case, and I am not acquainted with any library which may be considered as an absolutely typical example, or which may claim to be the last word in library design. This may be due to several causes. There is, of course, always the familiar drawback associated with our national character which constrains our public bodies to consider for how little cost they can attain their object rather than how well it can be done. This point of view operates detrimentally in many ways. It leads to the selection of an inadequate site, generally of an irregular shape, and dominated by rights of light and other disabilities which render the designing of an architectural building an impossibility.

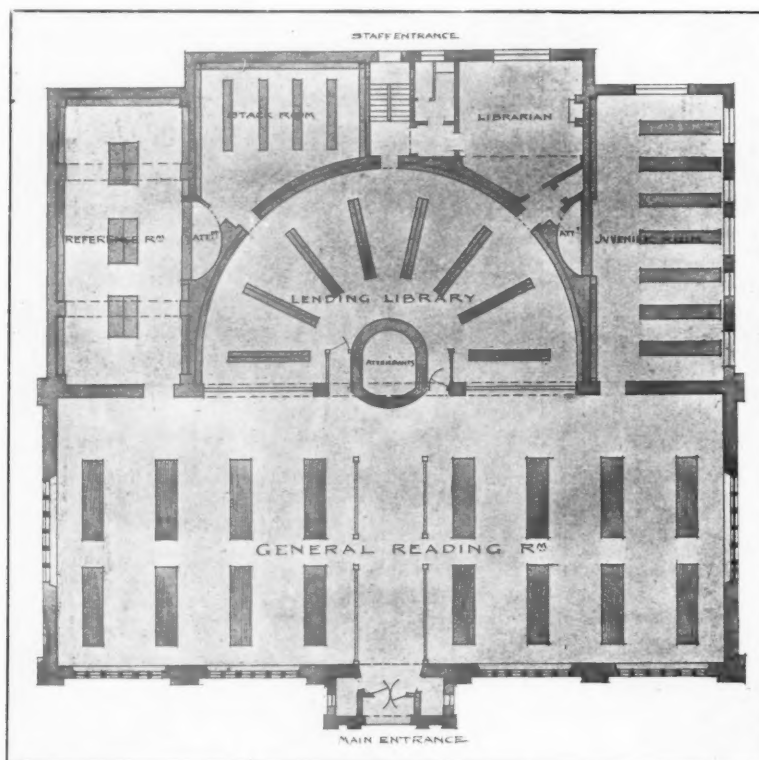
The accommodation required is almost always fixed without the least regard to the contemplated outlay. Many thousands of volumes which will probably never be acquired, and numbers of readers who will never appear, have to be provided with house room.

We are thus very seriously handicapped from the very outset; and, instead of being able to concentrate our efforts on a fine and worthy design, are compelled to dissipate our energy and exercise our ingenuity in devising cheap expedients and avoiding treading on the toes of our sensitive neighbours.

I am fully aware of the difficulties which public bodies labour under in the limitations of the penny rate, the opposition of a large section of their constituents, and other drawbacks; but I am of opinion that, in spite of these, if the problem were dealt with from the initiatory stage in a reasonable manner, and under proper advice, a much better result might in result

cases be attained. How often do we find in a library which is to serve a moderately sized district, and to involve a still more moderate outlay, accommodation is required for 20,000 or 30,000 volumes in the lending department! This needs a very large room, and I suggest that it is quite unnecessary. A lending library does not increase indefinitely, as a large proportion of the books, particularly fiction, becomes out of date from time to time, so that it may be said that shelving for from 10,000 to 15,000 volumes constitutes a lending library large enough to meet all practical requirements in an average district, and, if supplemented by an adequate storeroom (where books may be very economically housed), all that is needed in nearly every possible instance.

The reference library also is a room which is in many cases much over-sized. Except in special districts, it is very rare for this department to be used by large numbers of readers at one time. For an average library I should say that good accommodation for from twenty to thirty readers is very ample, and this does not require a very large room. A considerable number of books is, however, required; and if these are arranged around the walls the dimensions of the room must be increased to an extravagant extent. I would therefore suggest that the most reasonable arrangement is to place the bulk of the books in a stack room adjoining the reference room, where they may be most economically housed, and be to all intents and purposes equally easy of access.



PLAN ILLUSTRATING THE AUTHOR'S SUGGESTIONS.

Coming to the general reading-rooms, which are the most largely used, the usual treatment of these appears to be susceptible of much improvement. I am of opinion that the general conception of this important feature is fundamentally wrong. In almost, if not quite, all libraries this is merely a large room, or rooms, filled with tables or reading stands, spaced not more than six feet apart, and sometimes less. The result is that the room is more or less filled, and the floor space covered, without any readers. The constant movement which cannot be avoided must inevitably lead to much disturbance and discomfort of readers, and the main object of the room as a place for quiet and study is, to a great extent, defeated.

The ideal reading-room should, I think, be conceived on much more generous lines, and should partake more of the nature of a hall with probably an open roof, or, at all events, considerable height. It should permit of the spacing of the furniture very widely, allowing ample gangways in which persons could move without disturbing those who are reading. Arranged in this manner it could accommodate all classes of readers, except reference, and by obviating the necessity for several rooms might afford an economical solution of the problem.

Pursuing the same line of thought, it appears to me that the lending library might also be included in the reading-room, arranged possibly in a portion recessed, and that the typical library might virtually be reduced to a building of two main public rooms, viz., a general reading-room and library, and a smaller room for reference readers opening out of it.

An arrangement of this kind would obviate all passages, entrance halls, and staircases, and the whole of the available funds could be devoted to those parts of the building actually used by the public.

Whether such a plan would commend itself to the librarian, who will be responsible for its working, I cannot say. It should be very easy of administration, but it might be urged against it that there would be too much movement in the room to allow of comfort. I am, however, myself of opinion that the wider spacing of the furniture would obviate this objection. Such an arrangement as I am suggesting presupposes an ample and free site, which, unfortunately, is not often obtainable.

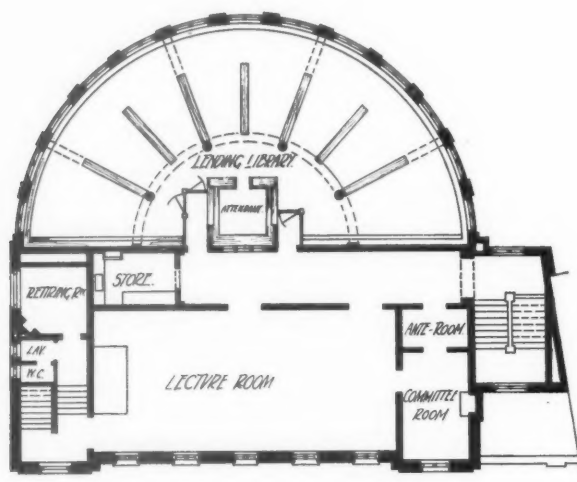
During the last few years the movement in favour of what is known as the "open access" system has been steadily gaining in strength, and there appears to be some likelihood that it will eventually supersede the familiar "indicator" system. The two systems involve entirely distinct and different methods of planning, and require approaching from totally different standpoints. As to the comparative advantages, I do not feel competent to speak—for a battle royal has been raging for years amongst librarians themselves on the subject—but will confine myself to the manner in which they influence the design of the buildings. With the "indicator" system the working staff is more or less concentrated behind the counter of the lending library, and the public rooms are generally arranged around this, so that the supervision may be exercised from this area. With open access, however, the case is somewhat different, the supervision of the lending department being a thing by itself. The staff devoted to this room is placed within a small central space commanding the entrance and exit and the entire area of the room, and from this arrangement it is practically impossible for them to control the other public rooms as well. They can therefore be treated as entirely distinct units, each to be supervised separately. In some way this tends to render the difficulties of planning rather less, but there are other points for consideration which present new difficulties. The necessity for the supervision of the lending library in all its parts from a central fixed point appears to suggest as the ideal plan for this room a semicircular form with radiating bookcases. This, so far as I have seen, is the most satisfactory arrangement; but it is very difficult, if not quite impossible, of arrangement on many of the confined and irregular sites which are in most cases selected. The placing of radiating bookcases in a

rectangular room appears to me very clumsy and unsatisfactory, and the parallel arrangement does not allow of complete supervision by the staff. It is, however, easy to exaggerate the importance of this supervision by the staff. In practice the public using the library very largely supervise themselves.

Another comparatively recent development in this country has been towards making libraries something more than a mere house for holding books and papers. An effort is being made to render them more widely useful as educational centres. The room set apart for the use of juveniles is being much extended and more thoroughly organised and popularised; and a room is being added to the institution where lectures on literary and kindred subjects can be given. The latter introduced a new element in the planning, as separate entrances and exits must be provided suitable for considerable numbers of people.

Regarding the library from this point of view, one may well begin to think whether the familiar newsroom with its costly fittings is really a necessity; whether newspapers are so valuable an educational medium as to warrant the provision of a large room specially for their accommodation, and the annual outlay necessary to stock it with papers. Few people are now so poor as to be unable to afford a halfpenny to buy a newspaper; and it cannot be denied that many of the most serious objections urged against public libraries have arisen through the existence of the newsroom.

An interesting experiment is now being made in the new libraries building in Islington, where no newspaper room is provided, but only a large general reading-room, containing magazines and periodicals. So far as I know the Islington authority is the first public body which has been bold enough to make such an innovation, and it will be interesting to watch the result. Only one small branch library has as yet been completed and opened; and so far as one can judge from the working of a few months, it promises to be attended with every success.



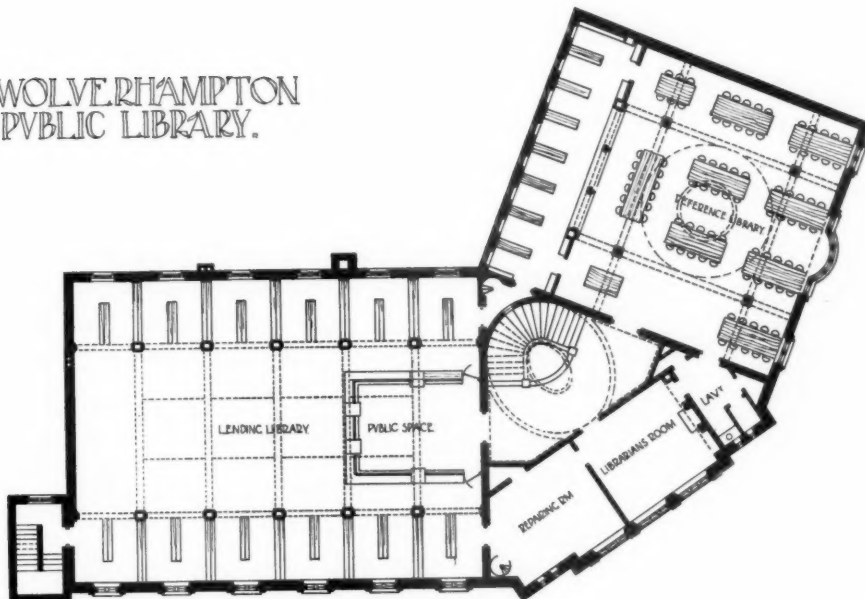
FIRST FLOOR PLAN

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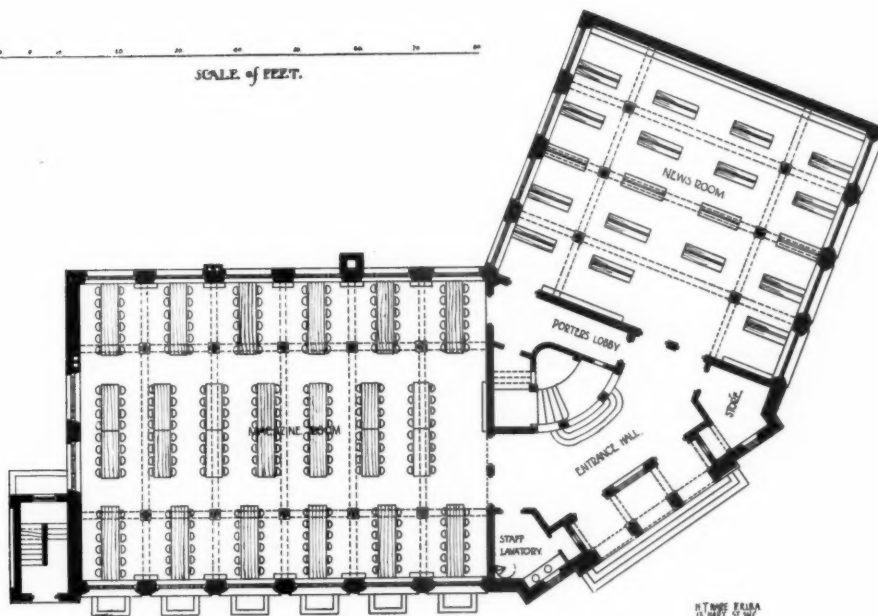
PUBLIC LIBRARY, MANOR GARDENS.

WOLVERHAMPTON PUBLIC LIBRARY.



FIRST FLOOR PLAN.

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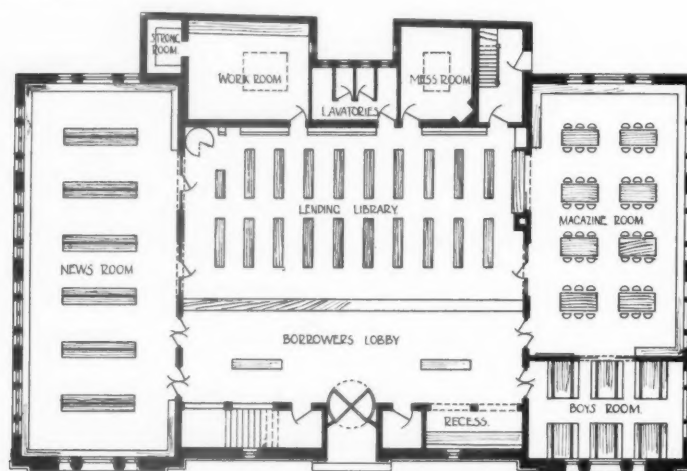


GROUND PLAN.

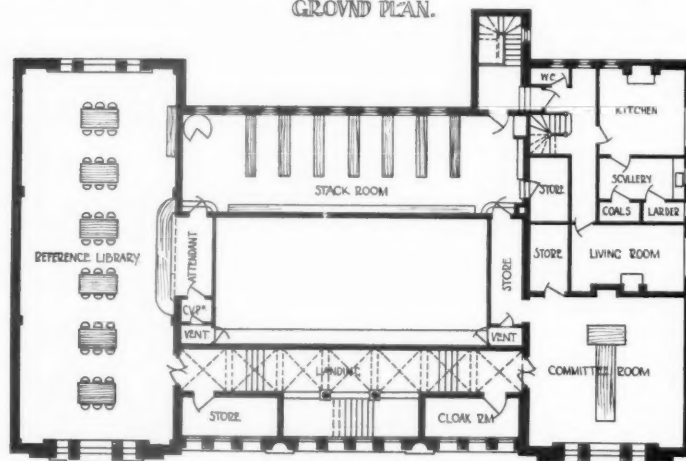
H. T. B. S. 13. 1902. 5. 1/2

It is difficult to generalise as to the furnishing and interior fittings of a public library, as the requirements in such case will vary very widely, and individual librarians will have their own ideas of working which will largely govern the arrangements. I think, however, it may be taken as an axiom that only hard wood should be used, and that the best material consistent with cost is wainscot oak. I should indeed suggest that this material be used for the joinery throughout the building, even at the risk of increasing the first cost. It is really an economy in the long run, as all painting is thus avoided.

It still remains for someone to discover the ideal floor for the public rooms of a library. Linoleum appears, up to the present, to be the most suitable; but if something of the nature of terrazzo, without its objections of noisiness and coldness, could be produced, probably the ideal would be attained.



GROUND PLAN.



FIRST FLOOR.

Healy, T. Nov. 1910
as built by Hammersmith



CENTRAL LIBRARY, HAMMERSMITH.

I should like, in concluding this short Paper, to again urge the desirability of reconsidering our views of the necessities of a public library in the direction of a much more simple type of building. I think the nearer we can approach to the idea of one large hall with very ample space, both as regards floor area and cubic capacity, the nearer we shall get to the ideal library plan. Such a building should be eminently adapted for supervision and general administration, economical in first cost, and comfortable and convenient for the readers who frequent it. I think also it might lend itself to a very dignified architectural treatment, which I regard as a matter of the first importance; for every public building should be a worthy landmark to the district where it is built, and should impress itself on the passer-by as a dignified expression of the public spirit which has prompted its erection. Good architecture is, to my mind, at least as essential as mere convenience, and may have as great an educational influence in its own particular direction as all the books the library may contain.

II.—LIBRARY PLANNING AS AFFECTED BY MODERN LIBRARY POLICY AND INTERIOR ARRANGEMENTS.

By JAMES DUFF BROWN, Chief Librarian, Islington Public Libraries.

THIS brief Paper will be devoted to the discussion of some modifications imposed upon modern library buildings by recent changes of methods and the adoption of more liberal lines of policy.

Long before Mr. Andrew Carnegie discovered the philosophers' stone which enabled him to lift so many architects into comparative affluence, library authorities were confronted by one great problem—how to supply the library needs of a town with strictly limited funds. The only factor which they considered was the amount available for spending, and it was rarely, if ever, thought necessary to estimate the probable number of readers who would be attracted to the building, and the resulting accommodation which might become necessary. The usual procedure was for a committee to fix an arbitrary sum, without regard to the effect of loans on a strictly limited income, and to assume that it was ample for all purposes. In most cases the sum provided only paid the builder for the bare structure, and such insignificant items as fittings and furniture, architect's fees, quantities, clerk of works, and that blessed item "contingencies" were simply ignored, because nobody troubled about them till the bills came in. The effect of such carelessness or simplicity was that many buildings cost nearly fifty per cent. more than the outside estimate, and they can be seen at the present day crippling along without books on the shelves, and regarded with disfavour by the public. It has been found by actual results that in London at least thirty-five per cent. must be added to the cost of a library building in cases where the specification does not include provisions to cover such items as furniture and the others just mentioned, while in the provinces perhaps thirty per cent. would be a safe amount to add. This point is mentioned because library committees have such extraordinary ideas as to the purchasing power of the ratepayers' money or the dollars so lavishly bestowed by Mr. Carnegie. For an inclusive sum of £5,000 they imagine they are going to obtain a building as roomy as the Agricultural Hall and as ornamental and dignified as the British Museum. Both architects and librarians suffer from these mistaken ideas of the price of building materials and professional advice, and are often

blamed when estimates are greatly exceeded. It is a pity that the English Libraries Acts do not specify the amount which shall be borrowed for building purposes, as in the case of the Scotch Acts, which lay it down as a law that only one-fourth part of the income from the library rate, capitalised at twenty years' purchase, shall be borrowed, and thus a definite check is put upon the mistakes and extravagances of committees. In most cases throughout England this reasonable proportion of the library rate has been enormously exceeded, with the result that many buildings exist possessing architectural merits, but few good points as libraries : being in many instances failures.

It has been necessary to labour this point of discrepancy between funds and needs because on it depends everything connected with the provision and arrangement of library buildings. In spite of the munificent Carnegie gifts, and in some cases because of them, municipal libraries still labour under the disadvantage of a rate limitation which decreases the efficiency of a public library service in proportion to the size of the town. Thus, a small town with a library rate producing £200 per annum, and provided with a Carnegie building covering an area of 4,000 square feet and costing about £4,000, cannot be regarded as flourishing, although it does possess a fine building. On the contrary, the craze for overbuilding, just because the money is easily obtained, has been responsible for, and will continue to multiply, cases of library buildings which are collections of bricks rather than of books, and whose equipment is so meagre, and funds so scarce, that the hours have to be shortened in order to avoid a gas bill which would extinguish the penny rate ! The relations between the population, income, loans, and readers likely to be attracted to municipal libraries, have been ascertained by a careful examination and analysis of the work accomplished and conditions existing in all the principal libraries of the kingdom, and the whole has been reduced to a series of averages which will serve as a body of factors applicable to any ordinary library problem. Bearing these factors in mind, and also the various changes in library policy which have taken place during the past fifteen years, it is possible briefly to formulate a few points which may serve as suggestions for discussion.

1. The idea of uniformity in library buildings and methods seems to have become quite prominent within recent years, and in certain directions it is claimed to be extremely desirable for every library to possess the same rooms, arranged in the same way, fitted with standard appliances, employing the same classification and catalogues, and being in all other ways a counterpart of every other library. It seems to be regarded as of supreme importance that a man from Leeds should be able to walk into a library at Plymouth and find his way about blindfold. Rules and factors are being sought which will render the accomplishment of this uniformity easy ; and when everything is thus standardised, it is to be supposed that architects and librarians will be entirely superseded by builders and caretakers. It is to be hoped that these factors for aiding uniformity will never be discovered, and that architects will continue to design, and librarians invent, fresh solutions of every problem presented. In this way only can improvements be discovered and progress become possible.

2. The practice of closely classifying books on the shelves in municipal libraries has led to some extraordinary modifications of methods, which in their turn have introduced many changes in requirements and arrangements. Exact classification itself has brought about changes in the height, spacing, and adjustability of bookcases, while a number of minor appliances and modifications have been rendered necessary for marking or guiding shelves and books. More important still is the influence which systematic classification has had on the plan of granting the public direct access to the shelves, known generally as the safe-guarded open-access system when applied to lending libraries. Fifteen years ago only a few libraries granted open access to a selection of quick-reference books on the British Museum and Patent

Office plan ; now there is scarcely a municipal library which does not throw open its reference department, in whole or in part, for the free use of readers without the need for application forms and other barriers to research. This is very largely due to the rapid advance in the use of exact classification, which has caused librarians to feel proud of their libraries, and made them desirous of allowing the public to come and admire and share in an arrangement, accomplished with much labour, which otherwise would have remained comparatively useless. Hardly any objection has ever been made against this form of open access, which is very surprising when one considers the number of valuable and expensive quick-reference books which exist, and the fact that they may be used in such libraries by utterly unknown individuals from the street. The same immunity from hostile criticism was not enjoyed by the safe-guarded open-access system when it was applied to lending libraries thirteen years ago. Indeed, the experiment at Clerkenwell in 1894 was condemned in the most unmeasured terms by all kinds of librarians, and doleful prognostications were made as to the ultimate collapse of the whole library world if such insane methods were adopted. Yet this experiment was only extended to the comparatively inexpensive and ordinary stock of a lending library, to which only duly guaranteed and respectable ratepayers, their families and dependents were admitted. Furthermore, unlike the reference readers, they were locked in after proving their *bona fides*, and could only get out on registering the books chosen. A number of architects must have received the never-ending stream of anti-open-access literature which littered the Post Office from 1894 onwards ; and many would no doubt be adversely influenced by the ingenious arguments put forward to prove that the open-access system was a humbug, if not a fraud. Well, the only result of all this gratuitous advertising has been to swell the adherents of the system from one to sixty or seventy, and it is clear that within the next few years the method will have become all but universal. From an architectural standpoint, the most important matter connected with the open-access system is the modifications in the planning of libraries which it introduces. In both reference and lending departments the bookcases must be made easily accessible from the floor without the use of steps, and the spacing of standard bookcases when facing each other must be arranged so that readers can stand back to back at the shelves and still leave a sufficient gangway for others to pass. This implies a minimum spacing of five or six feet between bookcases. The loss in storage room caused by this wide spacing and the disuse of all bottom shelves is largely made up by throwing into the room the lobby usually reserved in front of indicators and similar closed systems, with the result that the loss of space is very nearly balanced. The alleged loss of storage space for books in open-access lending libraries is not a serious matter, because, after the department has been open for a month or two, the chief complaint is not so much on account of lack of shelves as lack of books. As a matter of fact, shelving to store the maximum stock of any lending library is never required after a year's work save in places where the books are recalled annually for stocktaking purposes ; and even then, if the library is periodically weeded of obsolete books, congestion only arises in a very few cases, and only for a brief period. The best shelving for a public library is the homes of the borrowers, and for that reason elaborate efforts to find accommodation for books which are generally in circulation is a mistake. In some towns, notably Southport, Brighton, and Southend-on-Sea, the doubts of the local authority have led to a compromise on the open-access question under which indicators are used for fiction, and open shelves for non-fictional works. This plan, however attractive in theory, rather tends to complicate the arrangements and largely does away with that valuable supervision of reader over reader which is only obtained when all the borrowers are placed on an equal footing as regards access to the shelves. Why the reader of romance should be considered many degrees inferior to the reader of history or theology is one of those puzzles

which continually arise in library work. A citizen who reads the Robin Hood ballads is accounted a person of high intelligence, while one who reads *Ivanhoe* or any other version of that hero's exploits not in metrical form is supposed to be addicted to literary frivolity. A versified form of literature is supposed to be of greater intellectual value than a prose form, and no doubt, in the minds of some people, an indelicate drama of the Restoration period would pass muster as high-class literature where a clean, healthy, and well-written prose romance would be condemned. It is difficult to grasp this distinction between what is, after all, mere literary form. There are some novels as heavy and tough as the most solid and matter-of-fact history, and the effort involved in reading and digesting them is equal to what might be necessary to understand an abstruse work on mathematics. These are all good and sufficient reasons why differentiations of stock and readers should not be attempted in open-access libraries. The adoption of the open-access system in new library buildings will not introduce any fresh difficulties into their planning and construction, because it can be applied to any room of fair size. The simple barrier for regulating the entrance and exit of readers occupies but little space, and by arranging fiction round the walls all chance of crowding at particular points is avoided. In old buildings which have to be adapted for the system considerable alteration may be required, and this is one reason why many places are slow to make the change. It is only a matter of a short time, however, in quite a number of libraries, because already all their available counter space is occupied by indicators and showcases, and as the stock increases the congestion will become greater, and some other system must be tried. It is safe to predict that in a majority of such cases the change will be made to open-access rather than to modified indicators, card-charging systems alone, or other compromises. Whatever professional feeling may be, there can be no doubt that, both in this country and in America, public opinion is entirely in favour of more liberal and scientific methods of library administration, and in a few years' time impassable barriers between the public and their own books will have disappeared.

3. Another department in which great changes are certain to happen is the reference library, which has not yet taken the place it should in educational and municipal library work. It is too often regarded as a kind of expensive reading-room with a book-store attached in which little-used and rare books are housed at a cost out of all proportion to their utility. The function of the reference department in the past has been to *collect* books rather than to utilise them for purposes of research, and thus has arisen a series of book museums rather than literary workshops. The growth of open access and the steady spread of exact classification will gradually dispose of this very limited conception of reference library work, and the result will be a return to the sane and practical arrangements adopted years ago in the British Museum and other State libraries. It is difficult to understand why the British Museum plan of dividing its stock into much-used sections on open shelves, and less-used sections in stores, was not adopted in municipal libraries more generally in the past; but it is more difficult still to imagine a modern library authority persisting in the conservative policy of closed shelves with so many successful examples of open access to study and copy. There is nothing more irritating to a student or busy man of any kind than the petty worry and trouble of being compelled to hunt in bad catalogues for reference books, and then to fill up application forms and waste time waiting for the books to be fetched at the pleasure of a slow assistant. The contrast offered in the British Museum reading-room between the open and closed methods is most instructive. A book on the open shelves can be found and referred to without hindrance or loss of time, while almost any book which has to be applied for on a written form is rarely delivered to the reader under thirty or forty-five minutes. In the case of some books an hour must be spent in waiting, while the student who wishes to

make reference to a number of books would be well advised to write his application slips a week in advance, and hand them in at least a day previous to his visit. A quick-reference collection of books is a select library of works in dictionary form, comprising all the ordinary reference books which a reader wishes to consult rapidly and without formality or intermediate application: encyclopaedias, dictionaries of language, history, arts, science, quotations, geography, atlases, directories, year-books of all kinds, and, generally, the kind of useful book with which the walls of the British Museum are lined. Books not suitable for open shelves would comprise very rare books, local books, and special collections which have to be preserved, long sets of transactions of societies, and generally the less-used classes of books which most libraries are forced to accumulate. The arrangements necessary for this plan of division need not be very elaborate, and a reference room can have its open shelves arranged in alcoves or as simple wall bookcases, and the store collection can be railed off by means of a slight barrier, or kept in locked presses or in a separate room. A very important part of reference-room work is the provision which ought to be made for readers. Here, again, municipal libraries have generally failed to grant the comfort and isolation which the British Museum authorities wisely thought desirable. No serious student can work satisfactorily at a long table, common to perhaps other nine or eleven readers, some of whom are bound to be offensive as neighbours. A student copying mathematical problems might be opposite another student tracing large details from a huge work on architecture, and his papers would be liable to be disarranged, if not swept away, every time the architect swung round his massive folio. Again, the reader to the left might smell strongly of beer or tobacco, while the one on the right may be of a very restless disposition, or addicted to the emission of offensive noises. For all these reasons it is highly desirable, if the right type of serious student is to be attracted to reference libraries, that complete isolation should be arranged, so that everyone should have a reserved, self-contained place at a table, with plenty of accommodation for spare books and table space sufficient for the arrangement and spreading of reference works and papers. This provision will mean a little more room per reader, but the value of the department to students will be enormously increased, and it will become the recognised workroom for every student in the district. This plan of allowing separate table accommodation has already been tried in a few places, and the results are most gratifying.

4. The only other matter proposed to be mentioned now connected with the policy of public libraries which may in the future influence planning is the question of limiting the supply of newspapers. Already many libraries have cut down the supply to a considerable extent by dispensing with all halfpenny newspapers and those provincial newspapers which arrive too late to be of use. In a few towns the provision is limited to the exhibition of the "situations vacant" columns cut from the morning newspapers, and in one place no newspapers are taken at all. By limiting newspapers to the provision of one good daily, and the display of situations advertisements—as at Islington, for example—considerable economies are effected, and, perhaps, what is most remarkable, the public never miss them. In towns which have been for years committed to the policy of supplying newspapers there would no doubt be some difficulty in making a change, but in new buildings the question is well worth serious consideration. Some towns spend from £40 to £60 annually on newspapers alone, and when to this are added the cost of stands and fittings, lighting, staff and proportion of loans or the cost of providing the necessary space, it will be found that newspapers are one of the most expensive and least permanent items in the equipment of a library. It is needless to discuss the many reasons for and against the supply of newspapers, because local authorities must in the end determine all questions of policy; but everyone can admit, without committing himself to any opinion, that the columns of situations vacant are of real service to thousands of people.

This being generally allowed, it seems a wise compromise to limit the newspaper provision to this department, and so sweep away all more controversial subjects.

Briefly summarised, the main points presented for discussion in this Paper are as follows:—

1. Is it advisable in the interests of progress and efficiency to standardise library plans and methods by adopting one uniform system for everything?
2. Systematic classification by introducing more scientific methods of arrangement will necessitate some alteration in the structure and spacing of bookshelves.
3. The open-access system in both reference and lending departments will impose upon library plans certain alterations tending towards simplicity and the general abolition of barriers and screens. It will also require different treatment as regards spacing and arrangement.
4. Reference departments should provide more isolation and comfort for readers, and if this is recognised some difference in the size and arrangement of such departments will be rendered necessary.
5. The limitation of newspapers in news and reading rooms will simplify the problem of planning in connection with such accommodation, and improve the appearance of these departments.

In conclusion, I should like to express my sympathy with architects in their intricate task of pleasing the public, committees, and librarians, by quoting the words of Lord Cockburn in his *Memorials of his Time* when referring to certain difficulties which attend the man who devotes himself to the planning and erection of buildings: "An architect is almost the only professional man who can never be rightly judged of by the works which he executes. His art is costly, and each part is fixed as soon as it is done. There is no rubbing out. This would be severe, even were he allowed to have his own way. But how often does it happen that he is thwarted by position, poverty, or obstinate ignorance! He must perpetually sacrifice his taste to suit the humours and the purse of his employer. Yet nothing is so common as to hear an architect condemned on the mere sight of a work against every defect of which he has protested. Painters do not paint, nor do poets write, on these terms."

DISCUSSION OF THE FOREGOING PAPERS.

MR. LEONARD STOKES, *Vice-President*, in the Chair.

MR. MAURICE B. ADAMS [F.] said he had been asked to propose a vote of thanks for the Papers, and he did so with the utmost cordiality and the most entire appreciation of both the lectures in regard to the useful observations that had been brought forward. It so happened that he had himself read a Paper on the subject, and therefore he fully realised what both Mr. Hare and Mr. Brown said, that it was extremely difficult to say anything particularly fresh upon it. If the lecturers had realised that, what must he feel in venturing to make some remarks after they had concluded? There seemed to be a discrepancy between the two Papers, Mr. Hare wishing to co-ordinate in general the plans of all libraries by greater simplification of idea, and Mr. Brown protesting that we ought not

throughout the country to plan these buildings too much on the same lines. Probably Mr. Brown was looking at the problem from a librarian's point of view with regard to its utility in particular localities. That view he (Mr. Adams) was entirely in accord with, because the purpose of these libraries had been to a very large extent mistaken, in so far as their educational possibilities were concerned. The overstocking of newspapers had certainly been a mistake. Newspapers had deteriorated very much during the last few years. The system of snippety paragraphs, the appeals to the speculative energies of the readers, treasure-finding, and the like, were most detrimental to the intelligence of the community. The majority of such newspapers could very well be dispensed with; he doubted very much

whether the Press exercised the influence it used to hold over public opinion. Without entering upon politics, he thought it a curious circumstance, in considering the condition of the newspaper Press of London at the present time, that the Government had an enormous majority in the House, yet the interests they represented were not able to maintain even one decent morning penny London paper. The *Tribune*, perhaps, was no doubt a good paper, if somewhat heavy, but he doubted whether it could be compared in importance with papers representing the minority in opposition. The present condition of the daily Press warranted criticism, and the proposal to limit the space devoted to it in their libraries should be considered. With regard to the open-access system he chanced to have seen the number of replies obtained by the St. Pancras Library Committee from all parts of the kingdom as to the advantages in the opinion of librarians of this manner of conducting a library. The consensus of opinion thus collected was overwhelmingly against open access. He had been rather surprised at that, because several people, himself amongst the number, had been hammering away for years as to the advantages of that system. What he wished to do was to bring the public face to face with the books, so that they could choose what suited their individual requirements. There might be two or three reference books on a particular subject, some more or less obsolete; but one could not tell that until one had actually looked into the books. Often by handling the volumes one could get the information one wanted in a few minutes. He was strongly in favour of the open-access system, but he did not quite understand why Mr. Hare should refer to the places the library officials worked in as "hen-coops"; as a matter of fact open-access enclosures were more or less elongated counters, from which supervision could be carried on admirably. It was not that the public required so much supervision, as the possibility of being able to see them at any particular moment. If openings were more or less freely distributed round the rooms of the building, it would be found generally sufficient. The people behaved fairly well; they could never know exactly who was looking at them or when they were being supervised. The great thing was to give the opportunity of having them under surveillance. The Wolverhampton plan shown by Mr. Hare he considered the most capable and admirable one they could possibly have on such an extremely awkward site. He had been particularly struck, as a fellow competitor, by the ability displayed by the author of that design. As to the success of Mr. Hare's Hammersmith building, he could speak with some feeling, because here, again, he was one of Mr. Hare's competitors, and he realised the ingenuity of Mr. Hare's scheme. He should also like to say how much he appreciated the skill displayed by Mr. Hare in the Islington Central Library plan. There was no section shown, but the way the roofing of

the large upper room was managed was most ingenious, and he thoroughly appreciated the skill with which the stack-room was arranged. The stack-room at Hammersmith ran across behind the central area of the large room below, and the attendant in the alcove could retire into that store to get the books in the most convenient way. This plan had found some imitators, but when a man did a good thing like that there was some excuse for imitating it. He was sure Mr. Hare would be the last to object to such imitation. The heating of these buildings seemed often a most difficult business. Radiators made such a dreadful mess and occupied valuable wall space. Lately he had reverted to the old system of open gratings, thus getting the heat more generally distributed and away from the walls in the passages. The librarian for whom this had been done had assured him that the plan was quite a success. He had put cork lino into panels to reduce the noise made by walking over the gratings, and it had turned out satisfactorily, and certainly the warmed currents so disposed did not make such a mess. He had used hot air and got the inlets away from the walls, but even then the local discolouring which resulted was very detrimental to the appearance of the room. With regard to Mr. Hare's model plan shown—where the children would have to go through the reading-room to get to the juvenile department—that would be rather open to objection, but the difficulty of efficient control would not be so great as in the case of a lobby where the children could skedaddle out and not be got at at all. A back or side entrance for the children, again, was very objectionable. They were more likely to behave if they came in by the front way; but their having to go right through the reading-room would be rather disturbing to readers.

Mr. E. A. BAKER, M.A., Librarian of the Woolwich Public Library, who rose at the invitation of the Chairman, said he had very much pleasure in seconding the vote of thanks. Mr. Brown had distinguished himself among librarians by the boldness with which he had worked out his problems on first principles, and put them into effect regardless of opposition. He had distinguished himself more especially by reviving the open-access system and by his recent experiment in abolishing newspapers. He trusted his recent experiment would have the same success as the former one. The open-access system was not, of course, a modern idea. It was in force probably in the oldest libraries of brick and papyrus. It was certainly in force in the libraries of one hundred years ago. The closed-library system was quite modern, and he believed would be quite transitory. It was introduced about half a century ago, when public libraries and mechanics' institutes were first opened, bringing large bodies of comparatively uneducated readers face to face with large masses of books. There was obviously considerable difficulty in

knowing how to administer these crowds of readers and enable them to use the books intelligently. The difficulties were doubtless so overwhelming that librarians thought the best way was to shut the library up and dole out the books through a pigeon-hole. Mr. Brown had shown them how to adopt a more scientific system, and he himself felt sure that his prophecy was quite correct, and that the open-access system would sooner or later be universal. There had been a great deal of hostility, and a good deal of hostility still existed, to the system; but that was largely due to the natural inertia of librarians who were in charge of libraries organised on the old plan. The difficulty of converting a library on the closed system to the open-access system was very great indeed; probably in the near future the problem before architects would be not so much to devise new library plans as to convert the closed libraries into open-access libraries. In the library at Islington, which he admired very much indeed, Mr. Hare had carried out the most modern ideas of library administration, not only with the greatest economy, but also with the most artistic effect.

Mr. R. J. ANGEL, M.Inst.C.E. [A.], asked if Mr. Brown could give his experience as regards the loss of books on the open-access system. He should like the number to be given—not the percentage, but the actual number of books lost. Reference had been made to the disadvantage of the indicator system, which was due to the bad method of having to fill up the forms and give out the books after reference to the indicator, as against the great saving on the open-access system. He ventured to suggest that the excellent plan shown of the Southend Library, which gave a maximum of counter space, was a ready solution of that difficulty; given a long counter where the public could be distributed, and where there were several indicators, each indicator governing its own class of books, and with an assistant in charge of it, then the public would be readily served and quickly dispersed. The British Museum had been recommended to them as a model to copy. But one very good reason why the British Museum could not be copied was because of the system on which the borrowers became members of the library. It was very much more difficult to become a member of the British Museum Library than of a local library in a country town or in a London borough. Practically anybody could become a member of a library in London, provided he could get one or two guarantors to sign his paper. That was rather an argument against copying the British Museum. One might get a man of very indifferent character slouching into, say, a Council's library with dirty hands, and handling a most valuable book, as he would have every right to do, and perhaps leaving his mark on it. Another argument against the open-access system was the noise it engendered. People searching for books would discuss whether

they would have this, that, or the other book, and a lot of talking was the result, which must certainly be objectionable. Reference had been made to the point that the borrower wanted to find out the kind of book he was in need of, and this he could do on the open-access system. It seemed to him, however, that if a librarian did his duty, and properly catalogued the books and described them in the catalogue, the public would know the kind of book they were going to get. One cannot get a great deal of information from the backs of books; if the binding is pretty and the title is gilt, that might be an inducement to look at the book; but unless the book is taken down and its contents read through one cannot get much information about it. If the gist of the contents of a book were given in the catalogue, it would overcome every difficulty in that respect. He had two questions to ask. First, what was the number of books stolen from libraries where the open-access system was used? Secondly, had any libraries given up the open-access system in favour of the indicator or closed system? He believed that some librarians had abandoned it both in municipal and private libraries. In conclusion, he had great pleasure in supporting the vote of thanks for the very excellent Papers and the practical advice so freely given.

Mr. R. A. PEDDIE, Acting Librarian of the St. Bride Foundation Technical Library, said he had seen the library at North Islington, and it struck him as the result of a most happy combination of architect and librarian. It was occasionally the case for a library to be planned without reference to a librarian. Occasionally a library was organised and planned before the librarian was appointed, and unless the architect had had a considerable experience of the wants of a librarian from the librarian's point of view, something would be found lacking in that plan. It was absolutely necessary that the two partners in the concern—he would put it as broadly as that—should be in absolute consultation. The North Islington Library, he believed, had been the result of such a consultation and such a partnership. Mr. Brown's experience in library planning was very extensive. His article on the subject in his *Manual of Library Economy* was the latest word on the subject. They knew, too, that Mr. Hare had had a great deal of experience in library planning also. He (the speaker) had been over a great many libraries, but the North Islington building appealed to him as the most like what a library should be as any building he had ever seen. It was most admirably adapted for its purpose. The reading-room, with its semicircular shape, absolutely filled the bill. It gave perfect supervision, and at the same time the maximum space for the shelving round the walls and the radiating shelving in the centre. The lecture-hall, again, was admirably adapted for its purpose. The only criticism he had to offer was that sufficient space, he thought, was not given to the tables in the

periodical-room. The large periodicals, he thought, required more space. Probably that had been altered by this time. The present was hardly the place to discuss this question of open access *versus* closed libraries, but in his opinion there was no doubt whatever that the value of a book was immensely raised by being placed directly in the hands of the reader, so that he could look through it before taking it home to read. The view of a little number on a blue or red ground from behind a case, and a little entry in a catalogue, whether that entry was annotated or not, was not sufficient to indicate the style or temper of the book; but when the reader was able to take the book down from the shelf and glance through it, then he would be able to choose the book that would suit him a great deal better than by merely looking it up in the catalogue and then consulting a lot of little numbers of various colours, and then going blindfold for a book which he thought might possibly suit him. It must be recollected that with this indicator system one was not allowed to change the book the same day; generally speaking, one would have to keep it until the following day, and then journey again to the library to change it. It was possible that in a very uneducated community a certain modification might be necessary; but in a community at all educated the open-access system was very desirable, and he believed, with Mr. Brown, it must become the system extended over the whole library movement.

Mr. A. J. PHILIP, Librarian of the Gravesend Library, said he thought the librarians present must have felt quite happy. The subject of open-access had been tabooed in the Library Association for a long time; but at the meeting that evening they had been allowed to say just what they liked. He did not himself propose to say anything on it at all. Those librarians who were not actually in favour of it kept an open mind upon the subject. But there were two points which perhaps had been overlooked. One was with regard to the experiment of open access—it was not in an experimental stage just now, but it was an experiment—and the next, which was still in an experimental stage, was the abolishing of the newsrooms. These two experiments had only been possible owing to the number of libraries which had gone through the mill. There was no doubt that great praise was due to those gentlemen who had put these experiments into operation; but it was not fair to blame those libraries which were not able to put them into operation, because it was not in every library nor in every town that they could be used. Architects blamed librarians and their committees for the restrictions put upon them and the ignorance displayed in the initial stages of the building. But it was not always the case outside London where a neighbour was a stranger. In a country town, where everyone knew everyone else, a committee-

man or councillor was buttonholed at every street corner to hear at great length the views of his constituents. The ignorant public who had been educated in the different towns by the free libraries were the ultimate masters of the situation. It was useless to say that the committee or the librarian was to blame—it was the public. It was only in those places where the library had done a little that one saw the reason for other libraries doing a great deal.

Mr. E. GODFREY PAGE [A.] said he thought there was something to be said from the architect's, the librarian's, and the ratepayer's points of view against the open-access system, which had been almost ignored that evening. First, as to spacing. Mr. Brown said there ought to be 5 feet 6 inches between the stacks. At Mr. Brydon's library in Chelsea (recently altered by the Chairman) which had the indicator system, the space clear between the bookcases was 2 feet 4 inches, and that was enough. If 1 foot 2 inches for a double stack was added, it gave a centre spacing of 3 feet 6 inches as against 6 feet 8 inches for open access, or almost double. If this were true with a small library, it was doubly true with a large one, because one could not send the people in an "open-access" system up tiny spiral staircases; so that the superficial area was nearly four times as great in libraries of over 50,000 volumes, and nearly double in libraries under 50,000 volumes. The space that Mr. Duff Brown said was lost by the counters could always be utilised as the hall or way to other departments, and became insignificant. In Brighton the open-access system had been altered to the indicator system, for the ostensible reason that thefts were large, and Mr. Angel could take this as a reply to his query. He relied on the *Sussex Daily News* for that, and he believed it was correct. There was another objection. Pretty schemes could be seen on paper with bookcases radiating from the centre like a star, and the assistant in the middle was supposed to see right down the room; but if there were one or two people near the centre, he could not see beyond them, and the whole theory of the thing was crippled. Judging, however, from what many librarians had said to him on the matter, the strongest objection was not theft, but muddle, because a person coming, say, into the fiction department would take a book out of one bookcase, and he or she—generally she if it was fiction—not being quite sure whether she liked it or not would wander round the building with the book under her arm, and in the end, having decided on another, would have no idea what case she had taken the book from, and would put it on any shelf where there was room for it. Librarians told him that they had always to take books out of the wrong and put them into the right places, and that the amount of time thus lost in a year was very large indeed. He thought there were therefore two very real objections to open access, viz., (1) that the cost must be very

much larger, and to any architect who had met a committee face to face with the rigidity of the awe-inspiring penny rate this was very practical politics indeed; and (2) that the supervision was necessarily less, not so much because of theft, but because of the muddle involved in allowing the public to have uncontrolled access. This was a vital matter to all librarians and all committees anxious to keep down the number of assistants. To show that the indicator was not doomed, it might be mentioned that within the last few years two new indicators had been put on the market, and that both had had large sales all over the Empire. He should like in thanking Mr. Duff Brown for his Paper to ask if he could remedy one evil. His book—the best textbook for architects, librarians, and committees—was out of print now, and could not be got either from bookseller or publisher.

Mr. FRANCIS HOOPER [F.] said he should be glad to say a word in support of the vote of thanks, which undoubtedly was most deserved. While they had a great deal of food for reflection, there was one matter they might commend to the Institute Council. They had heard a good deal about the open-access system, and he thought many members would appreciate an attempt to carry out the system in their own library; he thought it highly desirable to employ skilled joiners to take the hinges and locks off the cases in the Institute library rooms.

Mr. J. OSBORNE SMITH [F.] pointed out that in the London Library, St. James's Square, which contains 300,000 volumes, the spaces between the gangways were two feet three inches wide, showing it was not necessary to have enormously wide corridors to get access to books.

Mr. H. V. LANCHESTER [F.], referring to suitable material for floors, said that recently in the United States he had seen an excellent material which was very silent and comfortable to the feet, and was said to last for an interminable time. It was called rubber-tile flooring, and was being introduced, he believed, over here. There was, however, one drawback to its use. He asked its cost. "Not very expensive," they said, "1.90 dollar per foot." That would be about 7s. or 7s. 6d. a foot! One of the speakers that evening had advocated a briefly annotated catalogue. He (Mr. Lanchester) was unwise enough a little while ago to belong to a library with a medieval name ("The Tabard"), and they sent him an annotated catalogue. It contained such notes as "a book of romantic interest of the Medieval Period"; of another book "with a strong scientific bias running through it"; and when he had got through two or three pages of the catalogue, he felt he did not want to read any book at all. The annotated catalogue, he thought, was enough to upset anybody's taste for reading.

Mr. JOHN FROWDE, Chief Librarian of the Bermondsey Public Libraries, said that, listening to the Papers and discussion, he rather had the

feeling of being at a Library Association meeting at Hanover Square than at the Institute of Architects. The whole of the discussion seemed to have revolved round one point, and that the least interesting point in library architecture—viz., "open access." With regard to consultation between the architect and the librarian, he was not sure that that was always a good thing. He could quite understand that nowadays no architect would plan a building for a public library unless he first of all consulted or utilised the best ideas that had gone before. Whether he did that in consultation with the librarian or not appeared to be almost a matter of indifference, for this reason: there were librarians and librarians, as there were architects and architects. Some librarians could not in the least direct or advise an architect, and for that reason he considered that an architect who relied largely upon his own knowledge and his own experience would act quite as well as by taking into consultation with him the average librarian on the planning of buildings. A librarian, as a rule, knew all about his books, but he must confess that he was not a success as an architect, and from that point of view, while the architect might adopt broad general lines from the librarian, it would be a mistake for the architect to permit himself to be led into details by the librarian. He was sorry the discussion had revolved so much round open access. One of the speakers had said that "closed" libraries did not appear to have a defender in the room. He (the speaker) might be an inefficient defender, but he stood as a defender of the closed-library against the open-access system for the reason that he had read, heard, and seen a good deal about it, and he would like architects not to go away from that room with the idea that the open-access system had proved the great success that was claimed for it. He would like architects to realise that there was a very great difference of opinion indeed upon this question, and that the balance of opinion was not on the side advocated by Mr. Brown and some others present. He had seen "open-access" in practice in reference libraries a good many years ago. He remembered the Liverpool Reference Library being specially planned for that purpose and fitted up admirably with special alcoves and reserved places, such as Mr. Brown advocated for readers, where they could be quiet and reserved, and get all the books they wanted, and pen and ink, and that kind of thing. The result was that it was abused, and the privilege had to be withdrawn, and remained withdrawn to this day, except for certain books of comparatively small value which might easily be replaced. He thoroughly agreed with the suggestion of a gentleman sitting near him, that if architects and librarians were asked to put their own libraries into an open-access system, they would rebel at once; but in dealing with other people's property it was a very simple matter to advocate open access. With regard to the loss of books, that was a well-known fact. It might not

be the case in every library, but it was in many libraries, especially in America, where the new development of this idea came from. It was only necessary to read the reports of public libraries in America to get ample evidence of this loss even to the extent of hundreds of books a year from individual libraries. He gave that, not as a matter of opinion, but on the actual reports issued by the authorities.

THE CHAIRMAN, in putting the vote of thanks, said he himself would not pose as an expert on the subject. They had heard, however, several experts who seemed to differ, but perhaps that was only natural. He had to confess that his sympathies inclined to the "open access." It might not be the most economical from the floor-space point of view, or from the number of volumes lost or stolen; but, so far as he could judge, it seemed to him the best, and, if it was the best, surely it might be worth a little sacrifice of floor space and a few volumes of fiction per annum. His knowledge of the subject, however, was limited, and he would not weary them on the matter. He was something like Mr. Adams: he also had been pitted in competition against Mr. Hare, and he could only say that if anybody came into competition with Mr. Hare he was lucky if he did not come out somewhere towards the tail-end. Mr. Hare's planning, as they all knew, was admirable, and they were particularly fortunate in having had this Paper from him. Mr. Brown had also given them several new points to think about, and they were greatly indebted to him.

MR. J. DUFF BROWN, in acknowledging the vote of thanks, referred to some of the points raised during the discussion. As regards losses in open-access libraries, where the stock was properly safeguarded the loss was insignificant. Clerkenwell, the first open-access library in this country, during the first ten years of its experience had lost two hundred books—an average of twenty per annum. The books were of insignificant value, such as text-books, taken away probably for use, not for sale. Against that must be put the saving effected by not having an indicator. That in itself was an insurance against loss for twenty, or thirty, or forty, or fifty years, according to the size of the library. The American losses alluded to by Mr. Frowde were easily explained by the fact that the system in American libraries was different. One need not have a ticket at all, and need not register as a borrower. Anyone off the street could enter a library and roam about the place, and go out with a book in his possession. That accounted for the disappearance of books in the American libraries. It was merely a matter of system. The same held good with regard to the British Museum. One speaker had said that the access was much more difficult there. But it was exactly the same. The

only difference between a municipal library and the British Museum with respect to borrowers was the age limit, which was twenty-one in the British Museum, and in the municipal libraries it was as low as eight. The same formalities must be gone through as regards guarantee and signing a form. One speaker mentioned the disturbance caused by people in open-access libraries discussing the books before them, and the freedom of indicator libraries from such an infliction. It was quite the reverse. In the open-access system only the ticket-holder was admitted, whereas in the indicator library a reader might come in with half his family and block up the space before the indicator. No municipal library in this country or in America had abandoned the open-access system. The only library he knew of which had gone back to the indicator system was the Bishopsgate Institute, and that was not a municipal library. With regard to misplacement of books, especially fiction, in an ordinary open-access library there was usually no fiction to misplace; it would be all out, in the possession of borrowers, and any misplacement in the non-fictional department did not take half an hour a day to put right. In the North Islington Library, with nearly sixteen thousand borrowers in one branch, the misplacements, where the average issue was something like twelve hundred books a day, did not occupy more than half an hour in the morning to put right. With regard to the balance of opinion being against open access, that was quite natural. The closed systems had been in existence since the Public Libraries Acts came into force in 1850, and it took a long time to make headway against such an accumulation of years. The anti-open-access opinion was very largely held by people who had had no experience of the system. With the people who had used the system, and used it properly with the proper safeguards, and who had arranged everything in a scientific way, the experience was quite different, and there was no thought of abandoning the system. He thought occasional conferences between architects and librarians would be a good thing. There were many small points which wanted threshing out.

MR. HENRY T. HARE said he had rather been hoping that someone would have attacked the plans he had put forward. He had quite expected some of the librarians present would have expressed the opinion that his proposals would not work, and that was one of his reasons for putting them forward, so as to have them discussed. Somebody, in referring to the open-access system, had remarked that it took a great deal more room. Of course it did, and it was a great deal more expensive in staff and everything else than the indicator system; but the great question was whether it was more useful than the other; and as to this there could be no doubt.



9, CONDUIT STREET, LONDON, W., 23rd March 1907.

CHRONICLE.

The President.

Members will be glad to learn that the President is making a good recovery from his recent serious illness, and it is hoped he will be well enough to take the Chair at the Meeting of the 8th prox.

Charter Revision.

The Committee appointed by the Council to prepare for their consideration the details of the Revised Charter and By-laws and the Bill to Parliament will be glad if members who have any views to put forward would communicate them to the Secretary at their early convenience.

Eighth International Congress of Architects, 1908.

News from Vienna states that arrangements are already in progress for the Congress to be held in that city from the 18th to 24th May 1908. The Emperor Francis Joseph is graciously according his high patronage to the Congress, and the Hon. Presidents include Princes of the Imperial House, distinguished ecclesiastical dignitaries, the various Ministers of State and chief officers of the Imperial Court, the Burgomaster of Vienna, &c. The formal opening of the Congress it is hoped will take place in the great hall of the Hofburg. It is understood that the Society of Fine Arts of Vienna will entertain members of the Congress in the exhibition rooms of the Palais des Beaux-Arts. The Society of Austrian Engineers and Architects will entertain the Congressists at a soirée, and will organise an excursion up the Danube. Other arrangements in view are an excursion to the Semmering, a Reception at the Hôtel de Ville, and a Fête at the Imperial Court.

Modern Church Planning.

To the Editor JOURNAL R.I.B.A.—

DEAR SIR,—In the Paper, of exceeding interest, by Mr. Corlette [JOURNAL, 23rd February], I observed that he elevated the pulpit as second after the altar in importance in a church. Perhaps he meant in the eyes of the man-in-the-street. Those who do not know the ritual of the English Catholic

Church would no doubt elevate it above the altar. But as it is, the font is the second ornament, without which no church is complete.

I may also remark that a view of an altar should be obtainable from it, preferably the high altar, and that if the font be placed in a baptistery the same holds good—or an altar should be placed there also.

The reredos should be the same length as the altar with a view to emphasising the latter, and when there is an east window a low form of reredos is preferable to those high canopies of drapery which detract from the altar. The low reredos is also traditional in our Church.

May I ask if the piscina is ever used now, and if not why not?

Finally, I may say that it adds much to the dignity of a Church to plan a wide central aisle capable of holding two rows of chairs when occasion demands, and that narrow side aisles enhance the effect.

With thanks to the lecturers whom I regretted to be unable to hear,—I am, yours faithfully,

PHILIP A. ROBSON.

Architects' Benevolent Society: Annual Report.

The Council of the Architects' Benevolent Society in presenting their Fifty-sixth Annual Report have the pleasure to record a year of increased prosperity and usefulness. Many new names have been added to the Subscription List, and the Capital Account has benefited both from donations and bequests. This favourable result is largely due to the letter of appeal which the President (Mr. T. E. Collett) issued towards the end of the year to over five thousand architects. The thanks of the Society are due to the President for his exertions in this matter, by which the sum of over £100 has been added to the Annual Income and £175 to the Capital Account. If the appeal had not been issued, the income would have been insufficient to meet the demands made upon it. Notwithstanding the success of the President's appeal the number of subscribers on the Society's books is still very small compared with the number of practising architects.

It is satisfactory to learn that the Allied Societies are taking an increased interest in our labours. Mr. J. T. Cackett in his Presidential Address to the Northern Architectural Association at Newcastle-upon-Tyne stated that there was no better way to help our less fortunate brethren than through this Society, and he believed that the amount granted to recipients in the northern province exceeded the subscriptions derived by the Society from the District. He also alluded to the fact that their Past-President Mr. Glover was now a Vice-President of the Society.

Eighty applications for relief were received during the year, and the sum of £748. 12s. 6d. was distributed in seventy-five grants. In addition to this, the sum of £188. 15s. was paid to pensioners, thus making the total amount expended in relief £927. 7s. 6d.

The investments have been increased by the purchase of £1,186. 17s. 9d. New Zealand Three per cent. Inscribed Stock for the sum of £1,067. 13s., which raises the total of amount of invested capital to £15,506. 7s. 5d.

The thanks of the Society are due to the A.A. Musical Society for the donation of part of the receipts of a students' concert.

Seven meetings of the Council have been held during the year.

The following gentlemen, being the five senior members, retire by rotation from the Council:—Mr. Rowland Plumbe, Mr. G. T. Hine, Mr. Ambrose M. Poynter, Mr. William Grellier, and Colonel R. W. Edis. To fill the vacancies caused by these retirements the Council have the pleasure to nominate Sir Henry Tanner, Mr. Edwin T. Hall, Mr. Lacy W. Ridge, Mr. John T. Christopher, and Mr. J. Douglass Mathews.

The Council have also the pleasure to nominate Mr. Henry T. Hare as a Vice-President.

The cordial thanks of the Society are due to the Royal Institute of British Architects for office accommodation and for the use of rooms in which to hold their meetings, and to the Secretary and Staff of the Institute for their help in many matters connected with the Society.

Revivals.

In a Paper on Revivals read before the Edinburgh Architectural Association last week, Mr. F. C. Mears, *Pugin Student* 1904, said that in times of unsettled conviction revivals were attempted, not by architects alone, but also by workers in other branches of thought who admired and tried to restore to life certain features of a former age. Great architecture is of two kinds—that produced by a whole people expressing their highest ideals in their buildings, and that of a very rich people building magnificently and employing mercenary labour. The finest of sculpture and the other arts is an organic part of the former, while the latter is merely covered with rich detail. The motives of revivalists may always be traced according as they revert to one or the other of these types. Mr. Mears traced the influence of the primitive building of East and West on even the most advanced work of later times, and gave examples of the unsatisfactory result of trying to combine the two kinds of work, *i.e.*, the architecture of great rivers and plains, of which Egyptian and Greek are types, and that influenced by the sea and mountains, which developed as Gothic. Of modern builders, the engineers best show this Western feeling in their works, which both on land and sea have a common quality of rightness, a quality necessarily lacking in revival work, which is obliged to compromise. With regard to the covering of the dry bones of engineering, modern painting and sculpture usually combine well with it, since all three are absolute expressions of natural fact, and it is probable that in this combination by the architect-engineers of

the future, there may be the beginning of a new architecture which shall be true to its age.

SIR ASTON WEBB, R.A., who has been appointed Rede lecturer for the current year at Cambridge University, will deliver the lecture on the 8th June in the Senate House of the University.

MINUTES. X.

At the Tenth General Meeting (Ordinary) of the Session 1906-07, held Monday, 18th March 1907, at 8 p.m.—Present: Mr. Leonard Stokes, *Vice-President*, in the Chair, 33 Fellows (including 11 members of the Council), 42 Associates (including 1 member of the Council), and numerous visitors—the Minutes of the Meetings held 4th March 1907 [pp. 339-40] were taken as read and signed as correct.

The following members attending for the first time since their election were formally admitted by the Chairman—viz., Frederic Wykeham Chancellor, M.A. Oxon. and Thomas Francis Tickner, *Fellows*; Sydney Jaques, Joseph Reginald Hobson, and Digby Lewis Solomon, B.Sc. Lond., *Associates*.

Papers on PUBLIC LIBRARIES by Henry T. Hare [F.] and James Duff Brown having been read and discussed, a vote of thanks was passed to the authors by acclamation.

The proceedings then terminated, and the Meeting separated at 9.50 p.m.

REVIEWS.

THE AMERICAN VIGNOLA.

The American Vignola. Part II. By Professor W. R. Ware, Massachusetts, U.S.A. Scranton. International Text-book Company, 1906. [Batsford, 94 High Holborn.]

The first part of the American Vignola, by our honorary and corresponding member, Professor Ware, was reviewed in our JOURNAL for 23rd May 1902. It treated of the five Roman Orders, and was supplemented by chapters on the intercolumniation and superposition of columns, and on other details. The present publication deals with the employment of the Orders in the composition of doors and windows, and the decoration of wall-surfaces, and with arches and arcades, vaults and domes, staircases, &c.

The first chapter, dealing with arches and arcades, might have been included in Part I., as the combination of the attached column, with arches between, was virtually a Roman Order, and the only one which the Romans can claim to have invented. It would also have avoided the difficulty of separating the superposed Orders treated in Vol. I. from that of the superposed arches between attached columns dealt with in Part II. As a matter of fact, superposed isolated columns were scarcely ever employed by the Romans, the only example known being the Septizonium, of which the remains in the sixteenth century were in too ruinous a state to allow of any rules being laid down for their relative proportions. This difficulty has apparently been realised by the Professor, for on page 3, speaking of the superposition of arches, he states,

line 25, "They follow the same rule that governs the superposition of colonnades," which he repeats and then drops the subject without showing its application in the case of the superposition of arches. There are, however, no rules to be prescribed for the latter; they are entirely subservient to the intercolumniation of the attached Orders, and fill the space between the same and the entablature with such varying proportions, as regards their width and height, as the intercolumniation allows of, the only rule being that on the lower story the width of the impost pier shall be half the diameter of the column. Thus, in the two earliest examples, the Tabularium and the Theatre of Marcellus in Rome, the columniation, i.e., the distance between the axes of the columns, being five diameters only, the height of the archway is much more than twice the width, whereas in the Doric and Ionic superposed arches, Plate III. (where Professor Ware has adopted the best proportions of $6\frac{1}{2}$ diameter for the columniation), the height is less than twice the width. In the admirable plates which Professor Ware has had specially drawn of the arches on one story only or superposed, he has virtually exhausted the subject, and they should be of great service as well to the professional architect as to the student.

These plates are followed by others on vaults and groins, in which we are glad at last to find an illustration of the *voûte-en-arc-de-cloître*, the cloister vault, no account of which is given in any English publication. We confess, however, to receiving a shock when we came to Plate IX., and wondered what the gabled roofs of the Rhenish churches had to do *dans cette galère*: we trust that the American architects will not take the hint and crown their skyscrapers with Romanesque gabled roofs.

Domes and cupolas, of which there are only, besides woodcuts, two plates, XIII. and XV., might be extended, as the dome is by far the most important architectural feature developed by the Italian revivalists.

Professor Ware in the preface to Part I. led us to hope that towers and spires would be included in Part II. We are in hopes, at all events, that in Part III. he will take up these two subjects, keeping clear, however, of Romanesque and Gothic examples, and will then return again to domes and cupolas, and possibly to that subject to which the greatest importance has always been given in the *Ecole des Beaux-Arts*, viz., the study of plans of great buildings. An analysis of the plans of the Palaces of the Cæsars, of the *Thermae*, and of the Forums at Rome, on which the students of the French School base their conceptions, would be of the greatest value.

The twenty plates which accompany the volume seem all to have been specially prepared for this work, and are not only reproductions from already published examples, with the possible exception of

Percier & Fontaine's remarkably fine staircase in the Louvre. They are all beautifully drawn with a clear and distinct line, those which appeal to us most being Plate III., illustrating superposed arches; and Plate XVII., circular staircases, which is a marvel of execution and careful setting-out.

R. PHENÉ SPIERS.

CARPENTRY.

Modern Practical Carpentry, for the Use of Workmen, Builders, Architects, and Engineers. Containing a full description of the Methods of Constructing and Erecting Roofs, Floors, Partitions, Scaffolding, Shoring, Centering, Stands and Stages, Coffin Dams, Foundations, Bridges, Gates, Tunnels, Excavations, Wood and Half-timber Houses, and Various Structural Details. Together with New and Simple Methods of Finding the Bevels in Roofs, Setting out Domes, Steeples, &c.; an Account of Failures in Construction and the Theory of Trussing Frames. Also including a Concise Treatise upon Timber; Notes on the Woods used in Carpentry; Various Tables; a Glossary of Terms and Phrases connected with Carpentry, and a Chapter on the Uses of the Steel Square. By George Ellis, Author of "Modern Practical Joinery," &c., Vice-President of the Incorporated British Institute of Certified Carpenters. 40. Lond. 1906. Price 12s. 6d. [B. T. Batsford, 94 High Holborn, W.C.]

Coming at a time when steel is more and more taking the place of timber, a book on carpentry may seem out of place. But Mr. Ellis has dealt so thoroughly with every detail of the craft that all who have to do with building must be interested in his work.

Commencing with a chapter on tools—and it is pleasing to note Mr. Ellis does not think the adze entirely a thing of the past—then following with descriptions of joints and fastenings, all the many forms of timber construction, both temporary and permanent, are dealt with in detail, including the methods adopted by the workmen in "setting out."

Among the many illustrations it is difficult to select any particular ones as of special interest. The zigzag partition, page 45; an American idea for sound proofing, Plate 1; a practically worked-out example of intersecting trusses; the American timber bridge, Plate 22; and the temporary stand for a shop window, page 155, may help to show the extent and variety of the subjects dealt with.

A well-illustrated chapter on half-timber work, both ancient and modern, is given, with others on causes of failure in construction: notes on timber, including classification and description of market forms.

Mr. Ellis in his preface claims to be a practical man writing a complete treatise on the whole craft of constructive carpentry, from the proper method of making a mallet to the construction of a cathedral dome; and as far as possible in a book of 400 pages and 1,100 illustrations his book justifies the claim and may be recommended to architects for reference, and to students in preference to some of the works written specially for them.

THOMAS DAVIDSON.

STEEL CONSTRUCTION.

Notes on Construction in Mild Steel. Arranged for the use of Junior Draughtsmen. By Henry Fidler, M.I.C.E., Longmans' Civil Engineering Series. Price 16s. net.

The author of this book remarks in his preface "that between the carefully calculated stress sheet or correctly drawn graphic diagram and the completion of a working drawing which shall successfully pass the ordeal of criticism . . . there is sometimes found a gap . . . and it becomes evident that the ability to produce . . . a correct graphic analysis and the ability to design a sound riveted connection are not quite one and the same thing." To assist the designer in bridging this gap is the chief purpose of this book. The text is divided into seven chapters, dealing with (1) manufacture of the steel, (2) sections in general use, (3) riveted girders, (4) columns and struts, (5) roofs, (6) marine works, and (7) protection from corrosion. The chemical constituents of steel and their influences upon its physical properties having been discussed, tests of the latter are dealt with, and the results of nearly nine hundred tests for ultimate tensile strength and elongation of mild steel are individually given, in addition to tables showing several hundreds of results of tests of cast steel and wrought iron, and some chemical analyses. The second chapter treats almost entirely of the "Mechanical Elements" of the rolled sections in common use for structural purposes.

The chief interest of the book for those to whom it is primarily addressed lies in the third, fourth, fifth, and sixth chapters, as they deal directly with constructive and practical details which will be of everyday use.

In his chapter upon roofs the author refers to "recent events" which have drawn attention to possible flaws arising from defective blacksmithing, and to the view now sometimes expressed that a duplication of tension members in large roof trusses may be desirable; but, in discussing the difficulties connected with welding and the devices adopted to obviate them, he makes no mention of the ordinary workshop method of testing welds in bars by heating the metal to a red heat close to one side of the weld and noting whether the colour flows uniformly past the weld or not. If there is a fault of appreciable size, this rough test will expose it. Among the notes in this chapter will be found details of the results of experiments to ascertain the rate of discharge of water from a roof gutter—a matter of some practical importance upon which little or no definite information is to be found in the ordinary text-books of building construction.

From the point of view of the architectural draughtsman the ninety pages or so devoted to marine engineering would have been better occupied by further notes upon skeleton steel structures, although the instructiveness of the careful discus-

sion of a few special cases such as those given will readily be admitted. Upon the question of protection from corrosion there are some useful observations, but nothing to indicate that we may hope for any really permanent and generally applicable means of checking oxidation. It is interesting to note that the author is very guarded in his reference to the protection of ironwork by embedding it in Portland cement or concrete; in fact, he plainly (and very truly) says that the condition of much iron and steel so embedded is "greatly a matter of speculation." Let any who are tempted to dabble in certain relatively new types of construction which are undoubtedly ingenious and theoretically correct first ponder well these words of Mr. Fidler. Some disconcerting facts can be elicited concerning the state of embedded metal after the lapse of some years, and it would be very useful if a collection could be made of notes of actual observations upon the subject, gathered from those upon whom the duty of maintaining such work has fallen.

The book, as a whole, should be of interest and value not only to younger students, but also to those architects who have not had the advantage of experience in the workshops. It suffers a little from the considerable length of its chapters and consequent difficulty of readily referring from the table of contents to the subject-matter; while the index, though not bad, might be much improved. The importance of exhaustive indexing in any technical book cannot be too often urged, and should be borne in mind when another edition of this book is, as it probably will be, called for.

MATT. GARBUTT.

TRAJAN'S COLUMN, ROME.

"Io dico di Traiano imperatore."—DANTE.

THE *Nuova Antologia* of the 1st November 1906 publishes an article by Cavaliere Boni [H.C.M.] on the origin of the legend which has acquired a poetical setting in the tenth canto of the *Purgatory* of Dante. The article is illustrated by forty photogravures, taken from sculptures, drawings, frescoes, engravings, tapestry, majolica, and bronzes, both Mediæval and Renaissance, showing how the legend of Trajan and the poor widow grew from century to century and from country to country.

There are two sources from which the legend is derived: one, a bas-relief with the poor woman in tears in act of supplication before Trajan—

'Tis of the Emperor Trajan I am speaking;
And a poor widow at his bridle stood,
In attitude of weeping and of grief.
Around about him seemed it thronged and full
Of cavaliers, and the eagles in the gold
Above them visibly in the wind were moving.

Purg. canto x. 76-81—

and the other the monument of the emperor himself, the statue on "which Pope Gregory turned to behold and caused the tomb to be opened."

The bas-relief does not depict the customary kneeling provinces, but a symbolical representation of a military road adapted to disperse cavalry, the standards of which are replaced by banners, the legionary eagles being of metal and not capable therefore of fluttering in the wind.

The origin of the legend is to be found in a bas-relief of the second century which is now built into the Arch of Constantine.

In investigating the sepulchral column of Trajan in support of the legend, first set on foot at the beginning of the seventh century, many difficulties arise, inasmuch as modern critics denied its *raison d'être* and repeated the dictum, gathered from Dion Cassius, that the column marked the height of a hill which had been removed.

The religious character of the monument dedicated to Trajan during his lifetime being thus obscured, it became necessary to drag from oblivion the funeral chamber; and the opportunity having occurred it was considered desirable to wall up a vault excavated prior to the eleventh century in the rock beneath the pedestal, and to trace the fragments of the base chipped off in the descent of the statue. Having regard to the stability and reintegration of the monument the exploration has been the means of ascertaining and recording many things unknown or forgotten.

The Column of Trajan was not comprised in the original design of Apollodorus, as it entrenched upon the area of the Forum Ulpium and did not show any cutting away of the rock or work of excavation, inasmuch as the area itself covers the remains of ancient streets and pre-existing buildings. This is not the testimony of works of excavation, but of the monument consecrated to Trajan between the basilica where he administered justice and the library, rich in whatever survives of Greek and Latin thought.

The vestibule of the pedestal has not only a door on the right by the staircase, but another on the left, leading to a small dark area adjoining the tomb. The sepulchral chamber, closed by three bronze doors, is five feet wide, ten feet long, and six feet high, and is lighted by an opening splayed on the inside like the loopholes in the circular staircase. Here was placed a monolith, a table large enough to receive two urns with the ashes of Trajan and the empress Plotina.

Arms and ensigns like the trophies on the tumulus of a hero are sculptured round the pedestal, with the vigilant eagles at the angles connected by garlands of oak.

A marble crown of laurel forms the base of the column around which winds the sculptured commentary of the Dacian wars, similar to the columns in front of the tumulus of the gens Julia. A statue above the capital exalted Trajan to the

ranks of the immortals in testimony of his words and works.

The recent researches carried out with systematic methods of stratigraphic analysis at the tomb of Bibulus, in the hemicycle of the Atrium on the slope of the Quirinal, demonstrate that the dedicatory inscription on the Column of Trajan has unfortunately been misread—like the *Pancon* of Alexandria, *ad declarandum quantæ altitudinis mons et locus tantis operibus sit egestus*, which consigned to oblivion the dedication of the Senate and the Roman people, expressing its destination by euphemistic silence.

The analogous exegesis of the inscription (evidently composed by disciples of Quintilian) is supported by numerous pavements (*strati*) of the First Empire, the Republic and the archaic age, deep in the valley, where, higher than other lofty buildings and even the basilica Ulpia itself, the Coclide Column rose to show, a hundred feet from the imperial tomb, the height to which were raised by mighty works the mount and the plain.

The story of Trajan and the widow is told in nearly the same words as Dante, though in prose, in the *Fiore di Filosofi*, a work attributed to Brunetto Latini, a contemporary of Dante.

As told by Brunetto the story runs thus. Trajan was a very just emperor, and one day, having mounted his horse to go into battle with his cavalry, a woman came and seized him by the foot, and, weeping bitterly, besought him to do justice upon those who had without cause put to death her son, who was an upright young man. And he answered and said, "I will give thee satisfaction when I return." And she said, "And if thou dost not return?" And he answered, "If I do not return, my successor will give thee satisfaction." And she said, "How do I know that? And suppose he do it, what is it to thee if another do good? Thou art my debtor, and according to thy deeds shalt thou be judged. It is a fraud for a man not to pay what he owes; the justice of another will not liberate thee, and it will be well for thy successor if he shall liberate himself." Moved by these words the emperor alighted and did justice, and consoled the widow, and then mounted his horse and went to battle and routed his enemies. A long time afterwards St. Gregory, hearing of this act of justice, saw the emperor's statue and had him disinterred, found that he was all turned to dust, except his bones, and his tongue, which was like that of a living man. And by this St. Gregory knew his justice, for this tongue had always spoken it; so that when he wept very piteously through compassion, praying God that He would take this soul out of Hell, knowing that he had been a pagan, then God, because of these prayers, drew that soul from pain and put it into glory. And thereupon the angel spoke to St. Gregory and told him never to make such a prayer again, and God laid upon him as a penance either to be two days in Purga-

tory, or to be always ill with fever and side-ache. St. Gregory, as the lesser punishment, chose the fever and side-ache.

"The inscription on the pedestal of Trajan's column cannot be understood literally. According to it a mass of hill equal in height to the whole monument (*i.e.*, 120 Roman feet)* was cut away. The inscription is:

Senatus . populusque . Romanus . imp . Cesari . divi . Nervæ . f . Nervæ . Traiano . Aug . Germ . Dacico . pontif . Maximo . trib . pot . xvii . Imp . Cos . vi . p . p . ad . declarandum . quantæ . altitudinis . mons . et . locus . tant . (is . oper) . ibus . sit . egestus.

Brocchi (*Suolo di Roma*, p. 133) has shown from geological evidence that the ridge can never have approached the height of a hundred feet, and he suggests that the inscription means that the hill was cut back in a slope to a point where the Quirinal was a hundred feet high—a very probable explanation.†

Professor Middleton, referring to a bas-relief on the north side of the Arch of Constantine removed by Constantine from Trajan's forum, observes:‡ "Some such relief as this [representing Trajan surrounded by attendants with figures below, among whom is a female with a child] was probably the origin of the beautiful story of Trajan and the widow quoted by Dante, *Purg.* x. 73-93."

JNO. HERB.

THE PROBLEM OF ARCHITECTURAL EDUCATION.

THE reports presented year by year by the Education Committee of the American Institute of Architects have been for several years among the most important contributions to the proceedings of the annual conventions of American architects. In 1894 the then Chairman, Mr. Henry Van Brunt, in a thoughtful and comprehensive Paper, drew attention to defects in the upbringing of young men intended for the architectural profession, and laid down certain well-defined lines of improvement. Mr. Van Brunt considered that the condition of architecture as a fine art, in spite of indications of recent advance in academic scholarship and in technique generally, was unsatisfactory, because no healthy progressive principle had yet become apparent. The progress had been rather of personal enterprise and skill than of principles, and there seemed at present little prospect of any large or characteristically national fulfilment. Mr. Van Brunt contended that as architecture was now in the hands of men of education, we ought to consider whether this education could not be such as to inculcate convictions, to make our young architects the agents of a far more

definite and orderly progress, and to inspire them with a certain consciousness of duty in respect to the development of a system of architectural forms less conventional in character, and more accurately adjusted to the expression of our new life. As the true basis of architectural composition of the highest sort is to proportion and to decorate structure, and as structure is constantly developing with new methods, new devices of engineering, and new materials, the architecture of the immediate future must necessarily assume new character, at least in its outlines, supplanting to a great extent those classic or romantic details or standards which custom has arbitrarily imposed upon modern practice. Are our present methods of education, Mr. Van Brunt asked, preparing our young men to accept these inevitable changes without a wasteful and futile effort to effect a reconciliation between ancient academic prejudices and these new things? Do we not need a much more scientific co-ordination of precedent, a much more philosophic analysis of the architecture of the past, than is secured by our present methods of education? The question is, not how are we to effect a compromise between engineering and architecture, but how are we to convert engineering into architecture—how are we to use the immense resources of beautiful precedent at our command in order to translate this prose into the poetry of a high art? Let the schools teach our young men not to conceal or disguise or condone in a mask of cold convention the inevitable changes of form which must come in process of time with the changes in our social and economic conditions, but to welcome them frankly, and to express them, not with quotations from other tongues, not with the affectations and pedantries of academical learning, but with the large freedom derived from a comprehensive knowledge of all that has been done or said in forms of art by all people. Mr. Van Brunt disclaimed all idea of "any such folly as the deliberate invention of a new style," or any possible amalgam of old styles; his point was the practicability, by an analytic study of precedent, without arbitrary preferences, of applying to the art of our times a synthetic method of evolution. Our art should be an art of scholars and artists, not of antiquarians, nor of amateurs, nor of pretenders. Our architects should be instructed and inspired by the past, not controlled by it.

Mr. Van Brunt's Paper had the effect of stimulating inquiry and awakening discussion upon the methods of architectural training in vogue throughout the country; and, as an immediate result, the Education Committee were charged to communicate with the principals of the various schools, to ascertain their views, and to accumulate data as to what was actually being done in the schools. From this period the American Institute, through its Education Committee, has been in constant touch with the various schools of architecture, the ateliers, the club classes, the Beaux-Arts Society, &c.; and

* A Roman foot = 0.972 English foot according to Penrose.

† Middleton, *Ancient Rome*, ii. 24-5.

‡ *Ibid.* ii. 36.

the Committee's reports at the annual conventions have kept the profession regularly informed as to the exact nature of the training the rising generation of architectural students were receiving at these institutions. From the latest report, which is printed below practically in full, it would appear that the Committee are satisfied with the sufficiency of the data collected, and that they consider themselves in a position to state the case and put forward some inferences and conclusions. The Committee consisted of Messrs. Ralph Adams Cram (Boston), Chairman; John M. Carrere (New York), Wm. M. Kendall (New York), R. Clipston Sturgis (Boston), S. B. P. Trowbridge (New York). The Report states that this Committee, made up of superficially diverse types, has found itself absolutely unanimous even in matters of detail. After some months of individual study, the Chairman asked each member of his Committee to embody his conclusions and recommendations in the form of a tentative report. These were examined at a meeting of the Committee, and, with the report of the Chairman, were found to be identical in spirit and in matter.

The Committee's joint report was presented at the American Institute's jubilee convention last January. Omitting passages of more local interest, the report is as follows:—

Architecture we defined as a Fine Art with three aspects: as a manifestation of pure beauty, as an enduring and trustworthy language that voices the existing best in civilisation, and as an exact science, through its structural relationships.

An architect we defined as one ranking in the class of men of culture, learning, and refinement, differentiated from the others of his class solely by his function as a creator of pure beauty, as an exponent through material forms of the best secular, intellectual, and religious civilisation of his time, and as an organiser and director of manifold and varied industries and activities.

From these assumptions, it follows necessarily that the object of architectural education must be the breeding of gentlemen of cultivation, learning, and broad sympathies, who understand the dignity and significance of art both as beauty and as language, who are perfectly proficient in the technique of the art they follow, and who can inspire, organise, and direct widely different classes of men.

Such was our view of the general situation and our unanimous conviction as to the essential nature of any sound system of architectural education. Examining the various agencies in America in this light, and that we might see how nearly they approached, severally and in mass, to the principles indicated above, we found them to consist in two forms: first, the elementary, *i.e.*, the "architectural classes" connected with public instruction and philanthropic societies, and the "correspondence schools"; secondly, the academic, *i.e.*, the regular schools of architecture; the voluntary combinations under the control of certain groups of architects, such as the independent *ateliers*, and the *concours* of the Beaux-Arts Society, and the American Academy in Rome.

The elementary systems we have been compelled to disregard for the time being, but we believe they demand the closest scrutiny, for while they may give a certain plausible dexterity to boys ambitious of becoming architectural draughtsmen, they cannot be considered as systems of education, since their methods are superficial and rudi-

mentary, the taste they inculcate frequently questionable, while they do nothing towards creating the basis of broad, general culture which is absolutely and primarily essential. Furthermore, we believe that these elementary systems may, and in some cases do, accomplish serious harm through inducing boys temperamentally unfitted for one of the most noble and exacting professions to throw themselves into an impossible career through misrepresentations to the effect that "architectural drafting" is only a trade, to be acquired as easily and by the same methods as stenography. We believe the Committee on Architectural Education may be of great assistance to the elementary schools, and indirectly to the architectural profession, by volunteering its friendly services in an advisory capacity, and we commend both this, and the close study of the systems themselves, to our successors in this Committee.

The Academic agencies may be divided again into two categories: one made up of those which aim to give a complete and final education, *viz.*, the regular schools of architecture supplemented by the Roman Academy; the other of those whose object is to develop, through a special insistence laid on certain points, necessary elements in the equipment of an architect which students and draughtsmen have been unable to acquire satisfactorily through their collegiate or practical experience—that is, the *ateliers*, the club classes, and the *concours* of the Beaux-Arts Society.

Now it is evident to us that none of the systems named above, is in itself, and independent of all other agencies, able to produce the combination of general culture, good taste, instinct for beauty and executive ability which make up the ideal architect. The architectural schools should, by their general training, do much towards the creation of broad and inclusive culture; they must ground their students in the history of art and civilisation and the correspondence between these two things; they will give him his fundamental knowledge of the essential elements of architecture as an art; they must enable him to lay the broad foundation on which he is to erect his superstructure of professional capacity, but the crucial point, the development of good taste, and the instant sense of beauty, they cannot touch through the scholastic agencies now marshalled to this end. We are unanimously of the opinion that this passion for beauty and this instinctive good taste may be inculcated, if at all, not through the methods of scientific pedagogy, but by the close personal relations and the keen enthusiasm that arise through the association of a group of students with a practising architect, chosen by the free will of the student because of admiration for, and sympathy with, his principles, his personality, and his achievements.

With the advantages of the *atelier* system comes a corresponding danger, that of a feudal following of one strong personality, and an unconscious exaggeration of his peculiar theories and methods. This danger is counteracted by the system of general competitions between the students in the several schools and *ateliers*, where each man, as representing each system or impulse, finds himself on a field of battle where individualism is put to the test and stands or falls by just so far forth as it has acquired universality.

This combination of the *atelier* and the *concours* is to a large degree the method introduced and followed by the Beaux-Arts Society, and we believe it essential in any scheme of architectural education; but so long as the *atelier* system is purely voluntary, and so long as the *concours* are conducted by a group of men without official status, and bound together by the traditions of one particular system and nationality of training, there is always the danger of an unwholesome predominance of one set of ideas, to the unintentional exclusion of others of equal value but of different origin. Such competitions conducted exclusively by advocates of Gothic or of *l'Art Nouveau* might conceivably defeat their own just ends.

Believing, therefore, that these two features of the *atelier* and the general competition are essential elements in any complete scheme of architectural education, and that to have their fullest effect they should become a part of the curriculum of every architectural school, we urge on the several schools the wisdom of action to this end, and on the Education Committee of next year consideration of the question how a scheme of general competitions similar to those now conducted by the Beaux-Arts Society, but official and universal, may be brought into existence.

In scrutinising the several schools to ascertain in how far each seemed to be working towards the development of the typical gentleman of general culture with special architectural ability, and acting on an unanimous opinion that design can best be taught, at least in its higher aspects, only through the personal influence of practising architects, while the instinct for beauty may be best developed by personal contact with those who already possess this instinct and the power to communicate it, we took the ground that the work of the schools should be considered primarily as a means towards the development of a man of general cultivation and as an agency for establishing sound and basic principles of art, which, through intimate contact with architects themselves, should be developed to their highest estate.

While our examination was necessarily limited, and, in view of the time at our disposal and the magnitude of the subject, even superficial, we feel that we are justified in saying that, if our assumption is correct, there is an apparent variation which is hardly explicable, between the systems pursued by the different schools, and while certain of them appear to be working on the lines we have indicated as, in our opinion, essential, there are others which seem to hold that special and technical equipment on the part of their graduates is the prime object of their training.

We are compelled to dissent from this latter view, holding that the object of architectural education, so far as the schools are concerned, is not the turning out of superintendents of building construction, clever and thoroughly equipped designers, or consummate masters of presentation, but rather men who, by their broad knowledge and inclusive sympathies, their familiarity with the comparative history of civilisation in all its aspects, their conversance with the art history of the world and their thorough grounding in the theory of art and the practice of design, are in a position to apply to the best possible advantage the practical experience that then must come through contact with the practising architect, both in the *atelier* and the office, and through the actual practice of the profession.

We desire, therefore, to urge on many of our architectural schools consideration of the question, whether they may not advisably diminish the stress now laid on purely technical education and strengthen that placed on all that tends towards general culture.

In our investigation of the subject, many questions have suggested themselves as worthy of serious consideration. We do not feel that our data justify us in making a specific report on these matters, but we name them and commend their consideration to our successors in this committee.

They are as follows:

What do the schools teach as to the expressive function of art in general and of architecture in particular, *i.e.*, as to art as an index of civilisation, standing high or low in exact relationship to the civilisation that brought it into being?

What is the attitude of the several schools towards the various styles, *i.e.*, do they all, or any of them, teach that there are one or more styles which are sound and logical, while there are others which may or may not be interesting from an archaeological standpoint only? If so, what?

What is taught as to the relationship between construction and function on the one hand, and design and decoration on the other, *i.e.*, is this relationship clearly

brought out in the case of Classical, Byzantine, Romanesque, Gothic, Renaissance and modern architecture, or is it ignored; each style being considered as an abstract thing, regardless of its aspect as a manifestation of the close community that must obtain between function, construction, design, and decoration?

What are the criteria of judgment of design in the several schools, do they vary, and if so, to what degree?

How much attention is given to the question of presentation in each school? And is there apparently an undue amount of time and labour given to this in certain schools, an inadequate amount of time and labour in others?

In view of the fact that the practice of architecture is rapidly becoming so specialised that it is apparently necessary that a student should decide at the outset as to whether he should follow the esthetic or the structural line of work, is it not desirable that the schools should divide their courses in such a way that a student might elect which one he would follow, artistic or structural, there being in the case of the former a maximum of esthetic instruction and a definite minimum of structural education; in the latter a maximum of structural education, a definite minimum of that which is in its nature esthetic.

To give a general *résumé* of our conclusions, we report as follows:

The object of all education is to make more effective units. For this, the fundamental equipment is such knowledge of the language, literature, and history of one's own country as will enable him intelligently to take advantage of opportunities and such knowledge of the literature and history and art of other countries as shall give a broad general consciousness of what civilisation is. The possession of this knowledge is what is meant by cultivation.

When a man adopts a special branch of industry and thus limits his useful effectiveness to a distinct field, special training and knowledge are required in addition to general cultivation, which nevertheless remains the fundamental essential.

Schools of architecture are established for the purpose, first, of insuring the pupil in the possession of general cultivation; second, to give him a thorough technical equipment in the history and literature of architecture and in the laws that have been established by precedent; third, to make him familiar with present conditions and practice. In no one of these fields is his study completed in the school; he is simply started in the right way. In general cultivation and in a knowledge of the history of architecture it is essential that the student should be fully equipped, while his acquaintance with methods and practice may be, and indeed will be, largely acquired later.

It is on the first two, then, cultivation and the theory of design, that attention should be centred. Admirable as our schools are, it can do no harm to emphasise the point that they are training men to be intelligent architects, not skilled draughtsmen, and that manual dexterity is dearly bought if it is at the expense of intellectual equipment. Skill can readily be acquired with practice: nothing in practice quite takes the place of sound school training.

The schools should give the student a thorough grounding in the great architectural precedents and their application, and an intelligent understanding of them, so that he may know why they became established and to what extent they meet modern requirements.

Of prime importance are the classic orders, not for what they are in themselves, but because they are the terms, the language, in which a very large part of our architectural heritage is expressed. With a thorough knowledge of the orders and their application in Greece and Rome, one is in a position to understand the varied expression of the Renaissance in Italy, in France, in England, in Spain and in her American possessions, and here in the United States.

Almost if not quite equally important is the knowledge of Christian architecture; the whole development that followed on the fall of the Roman Empire, and which, through Syrian, Byzantine, Southern Romanesque and Norman, finally culminated in the wonderful architectural monuments of the Middle Ages. The one is the history of a great intellectual and sensuous movement, the other of a great spiritual movement. In both is the sense of beauty very marked, in both is construction recognised as the basis of all good architecture.

The knowledge of these things is fundamental for the education of the architect; ability to apply the knowledge is essential for practice. The student may learn *how* to apply his knowledge in the school, even though the real application of it comes later. It is in teaching the student how to apply his knowledge that the architect can be of real use to the teacher. The man in constant active practice, to whom the school is but an occasional occupation, brings to his work a spirit, an enthusiasm, a point of view, which are essential for the development of the critical faculty.

We believe that the more important work of the school, general cultivation, and the theory of design, which can best be taught by the trained teacher, should be supplemented on the less important side, the practice of design, by the active assistance and co-operation of the architect.

If this is to be done in the most effective way, unity, both of aim and of action, is desirable for the principal schools of architecture, so that those in charge, who are necessarily most familiar with the work, themselves may determine on the best methods.

This unification we are almost inclined to consider the crux of the whole matter. Important as they are, methods must be secondary to impulses. At present, it seems to us, not only does the idea of general culture as the indispensable basis fail of its due recognition—the general tendency being towards the development of the specialist, or *savant*, rather than of the well rounded and cultured personality with a special equipment for architectural expression—but architectural education in the United States tends towards an undue individualism and centralisation on the part of the several schools. Educationally, the architectural profession seems to be in about the position of the thirteen Colonies before the adoption of the Constitution—even before the ratification of the Articles of Confederation.

We believe that, on the whole, Architecture is being taught in America with a broader view, and in certain respects more effectively, than in any other country. Through co-ordination, a unification of standards, and co-operation, we believe that in a few years the education offered in this country might be looked upon as final, except for the absolutely necessary element of study and cultivation through travel and research among the inimitable monuments of the pagan and Christian past. We object to considering our own schools merely as feeders for the Schools of Fine Arts in Paris, and we look forward to the time when a great Post Graduate course shall be possible in America through a great central School of Fine Arts in Washington. To make this possible, we must first of all achieve a certain amount of co-ordination, unification, and co-operation between all our now somewhat aggressively independent schools, and we believe that the first step in this direction would be the acceptance by all of the principle of general competitions, and the establishing of an official, central, and representative body that should put this principle into practice.

SUNDRY DRAUGHTS AND PLANS BY HUNTINGDON SMITHSON, OF BOLSOVER.

By MAURICE B. ADAMS [F.].

A UNIQUE and extremely interesting assemblage of original drawings by Huntingdon Smithson, the architect of Bolsover Castle, Derbyshire, was shown at the President's "At Home" on Monday, 25th February, and attracted considerable attention. The collection, which was kindly lent by Col. W. L. Coke, of Broke-hill Hall, Alfreton, comprises considerably over fifty plans, sketches, and designs carefully arranged on about fifty sheets. Lord Byron purchased these documents, some time prior to 1762, from the descendants of the Smithsons' family who lived at Bolsover, and in 1778 or 1779 the Rev. D'Ewes Coke acquired them at Lord Byron's sale. Many of these draughts have no titles, and none are signed; but no doubt exists as to their authenticity. Huntingdon Smithson died on 27th December 1648, and was buried in the chancel of Bolsover Church, where his epitaph bears a fulsome record in appreciative verse. Robert Smithson, his father, carried out Wollaton Hall, which was originally designed by John Thorpe. Smithson the elder was born about 1535 and died in 1614, and was perhaps better known than his son, having also previously been "the undertaker and overlooker" of the courtyard elevations and interiors of Longleat, which he completed in 1566. The drawings of Wollaton carefully preserved there show clearly enough that Robert Smithson must have been a very capable architect. From all accounts he subsequently was employed by the truculent "Bess of Hardwick," the famous Elizabeth Countess of Shrewsbury, to design Hardwick Hall in 1576.

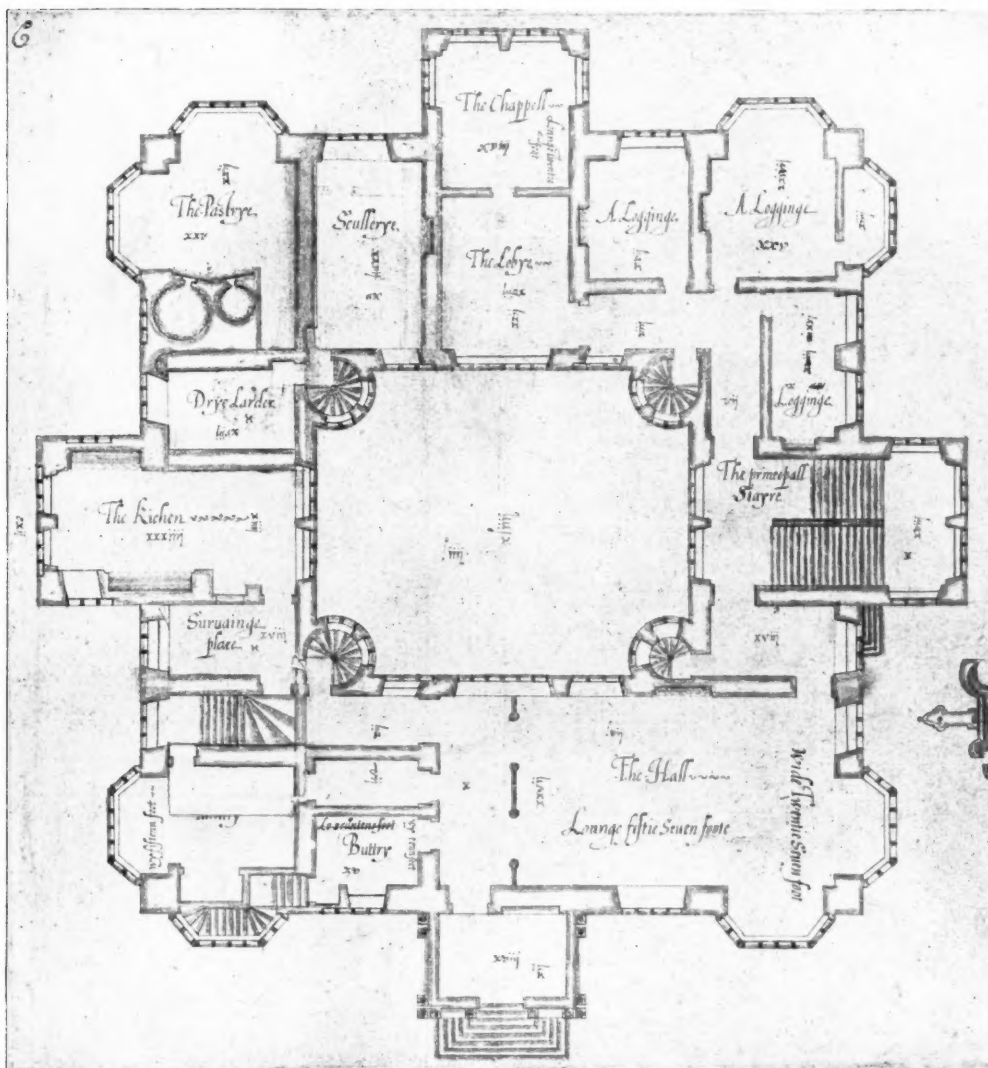
Perhaps a few of the drawings to which these notes refer may have been made by him, but there is no evidence to warrant such an assumption; indeed it is much more likely that they are all by his son. The dated ones were certainly executed after the demise of the "Gent architect and surveyor unto the most worthy house of Wollaton with diverse others of great account." * Huntingdon Smithson, who had the advantage of his father's experience, teaching, and connection, was sent to Italy by Sir Charles Cavendish, Duke of Newcastle, to improve his knowledge of architecture before the additions, which he subsequently carried out, at Bolsover Castle were undertaken. These works included the stables which he finished in 1625, and also the riding house, built some two years previously. The former building provided forty stalls, and it measured 130 feet long by 40 feet wide. Robert Timmins, the "architect and builder," had just prior to this date erected

* Epitaph to Robert Smithson in Wollaton Church.

the hall at Blickling in Norfolk for Sir Henry Hobart, who died in 1625. Timmins, his architect, died three years later, and lies buried in Blickling Church. This allusion is made here because the similarity of some of the details of Smithson's planning, as shown by these Broke-hill Hall drawings, appears to have led to an erroneous statement as to Smithson having designed Blickling. John Smithson was, of course, of much later

date, and he is generally supposed to have been the architect of Nottingham Castle, 1674-9.

Three of these drawings thus shown at Conduit Street are executed on parchment, all the others being drawn on paper. The draughtsmanship is much neater and generally more workmanlike in treatment than John Thorpe's autograph drawings in the Soane Museum. Smithson's plans are particularly excellent, with charming lettering, much

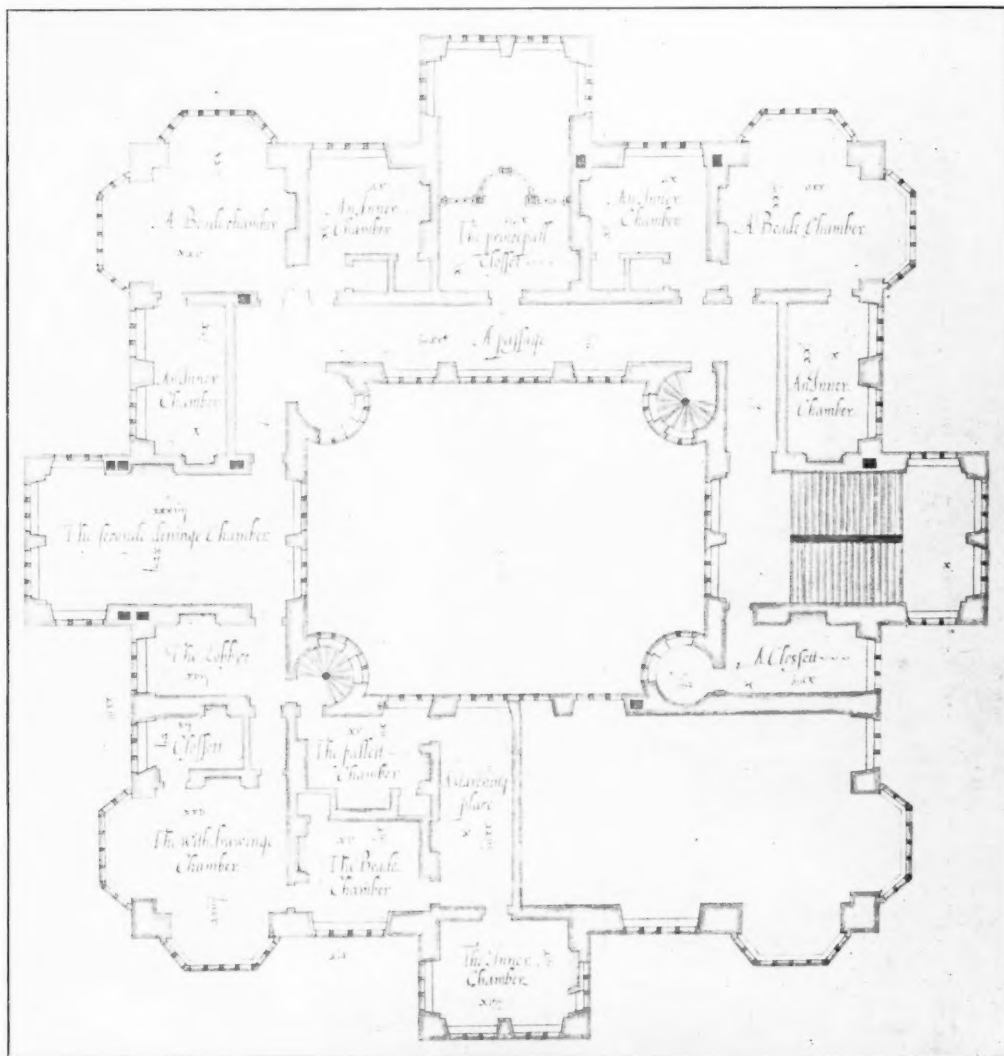


GROUND PLAN FOR A HOUSE.

From the drawings by Huntington Smithson (early seventeenth century), in the Collection of Colonel Coke, of Alfreton. Reduced about half, linear.

elaboration being devoted to the scales attached to the drawings. Some of the names of the apartments are in red, and colour is used on a few of the roofs in the elevations or in plans of ceilings. The imaginative faculty of the architect seems to have induced him to employ several flaps neatly gummed on here and there so as to show alternative contrivances of parts. In the detail called "The upright draughte of the Italyane Wyndowe at

Arendell House" Smithson displayed much ingenuity, for he skilfully made the shutters to open in this way, and an inner set of flaps is also made to serve for the leaded lattices; while the detail plan below clearly delineates how the superior or enclosing casements, likewise opening inwards, shut against the mullion outside. Another sheet exhibits the exterior of a similar "Italyane" window with its iron balcony or "pergular," as he terms



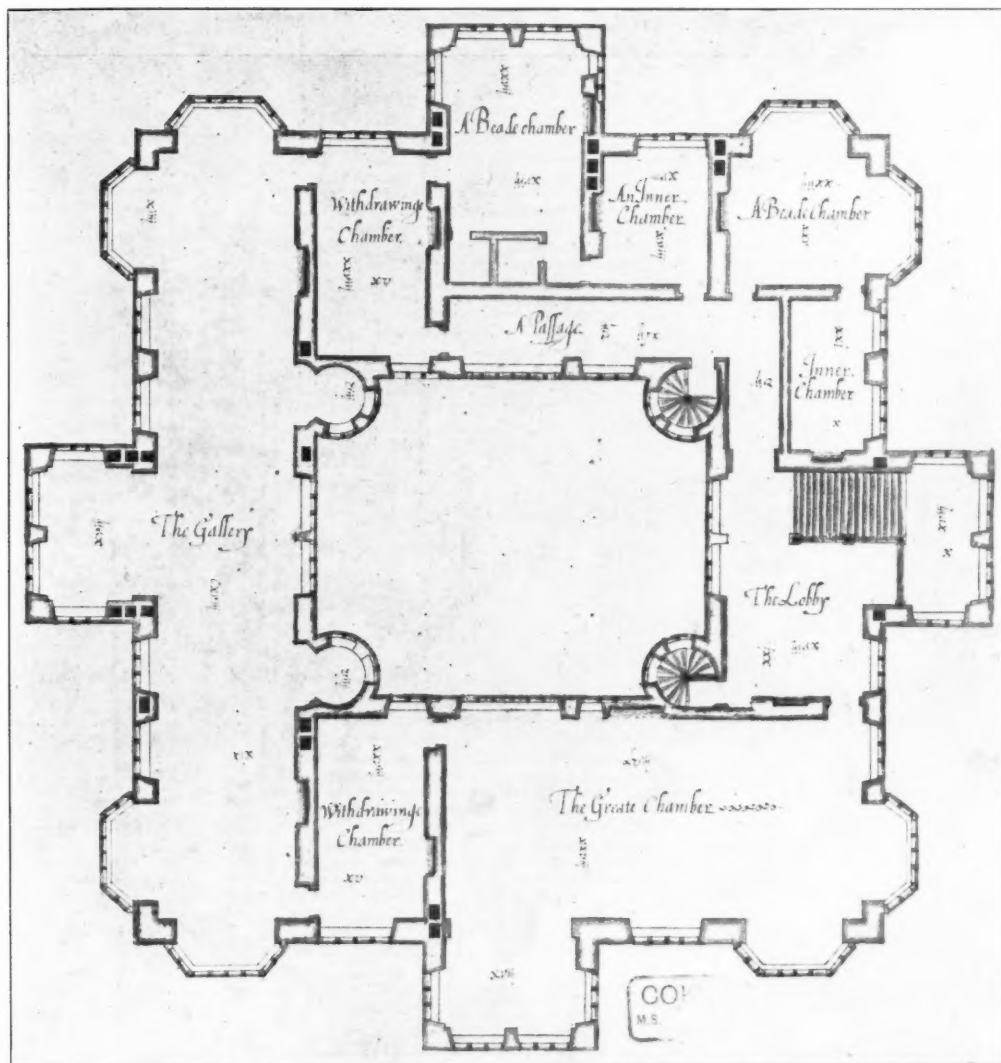
FIRST-FLOOR PLAN OF A HOUSE.

From the drawings by Huntington Smithson (early seventeenth century), in the Collection of Colonel Coke, of Alfreton. Reduced about half, linear.

it. The dimensions figured on these sheets demonstrate the exactitude of his methodical mind, and even in the smallest delineations of carpentry he carefully shows the pins and framings. For example, "The platforme of a frame for the Teachinge of a yonge Horse Before Hee come to the Ridinge," "an obedience place for an horse," being set out to a larger scale in detail, is a model of what such a draught should be, save that the

perspective of the moulded terminals to the posts is very much out of drawing. The designer anyhow leaves no doubt as to his intentions.

Admirable and curious as some of his screens and other detail "platformes" or "uprightes" are (half geometrical and partly in perspective), the chief value of this collection of Huntingdon Smithson's drawings undoubtedly consists in the development of the planning of houses, which they so well illustrate.



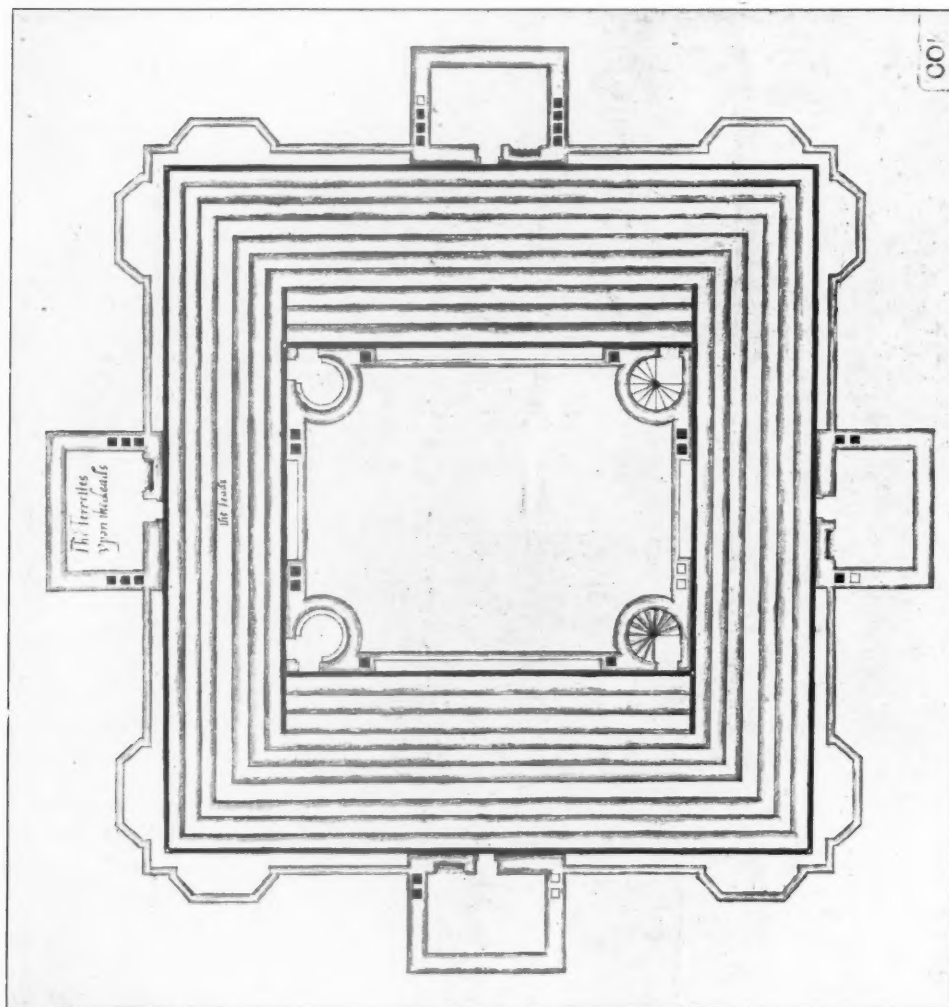
ALTERNATIVE FIRST-FLOOR PLAN FOR A HOUSE.

From the drawings by Huntingdon Smithson (early seventeenth century), in the Collection of Colonel Coke, of Alfreton. Reduced about half, linear.

His plans of Bolsover and Trinity College, Cambridge, are archaeologically interesting as records; and so are the sketches he has left of Wollaton, also his designs for "Fulke Grevelle's Bathe House in Houlborne," and Lady Cooke's house in "Houlborne, 1619," with its big Dutch-like pediment and enormous projecting canted bay; "The Pergular at Colonel Cecil's House in the Strande"; "The House at Twyford's" (shaded in a most incorrect and odd fashion); and "Newe building at Sant Jeames,

1619" (a three-arched way gate-house), which may all be included in the same category.

But the plans which chiefly merit study are those which are distinguished by his decided departure from older types of domestic contrivance. The originality which they display is certainly remarkable. That Smithson was well acquainted with the earlier methods of planning is clear enough from his plans of "Workshop Mannor," drawn to "the skalle after 20 in one inche." Its hall is "62 foote



PLAN OF THE "LEADS" OR ROOF PLAN OF A HOUSE.

From the drawings by Huntingdon Smithson (early seventeenth century), in the Collection of Colonel Coke, of Alfreton. Slightly more reduced than the plans on preceding pages.

longe, wyde 33 fo." with "Butterye," "Panterye," and "Survayeing Place" leading to the kitchen, attached to which is a "Boylinge Place" and "Pastery." At the other end of the hall a long narrow apartment of considerable size is called "The Warderope," "a store houfe over the Wyne Sellar" coming at its rear with a shelter "For Wd. and Colls."

The parchment drawings already referred to show the plans of "My Lord Sheffield's House to $\frac{1}{4}$ inch scale." The building is of the Inner Court type, having square turrets in the angles, including two newel spiral stairways. The approach to the house is by an archway through the front block, also very like Blickling. Facing this portal is an unusual verandah betwixt the flanking turrets, that on the right having the entrance door on its return side very similar to the left-hand portal of Burton-Agnes in Yorkshire, which it only resembles, however, in that respect. This porch in Lord Sheffield's house opens immediately into the Great Hall, which has a screen shown in the customary position. This apartment measures 63 feet by 30 feet, with the "Cychinge" and offices to the right, located together in the orthodox fashion. Over the front block occurs the Long Gallery, 137 feet long by 18 feet wide. The engrossed lettering on these plans deserves our admiration for its neatness. There is a separate "Dynyng Chamber longe 44 foute, 22 foute wyde" apart from the hall, and a feature in this plan is made of the passage ways, which are, however, only partially employed, the older method of reaching one room through another being otherwise adhered to. Considerable skill is displayed by the figuration of the "Scalle" with compasses and scrollwork as a decorative adjunct to the drawings.

The four plans herewith reproduced illustrate a remarkable scheme for an unnamed house of considerable merit and no small pretensions. We have chosen these because they indicate the decided advance in design to which reference has already been made. The ground-floor plan has some flaps upon it to illustrate variations of parts, but two distinct and complete alternative arrangements are shown for the first floor. The internal courtyard in the middle of the block has no means of approach. It serves really as an area for light and air round which this four-square mansion is contrived, having four circular turrets in the angles of this courtyard. The porch occupies the central place of the entrance elevation and leads in the usual way direct into the hall; but note the departure from traditional usage in the position of the kitchen and further offices, extending as they do round as far as the wall of the "Chappell," which is situate on the far side of the house, and corresponding with the entrance bay on the front. The doors between the kitchen and dry larder, and between that apartment and "The Pastery," do not figure on the plan as here reproduced. It is impos-

sible to show the alternatives of the flaps in one photograph, of course. "The princepall Stayre" beyond the hall is situate in the middle of the right-hand façade, and it balances the kitchen pavilion on the left-hand front. A garden door occurs in quite a modern way (on an alternative flap) next the staircase hall. The steps from this door appear on the plan as given, but the door which occupies the position of the window is not here shown. "Loggings" lead out of the passage extending to "The Lobby" opening into "The Chappell." One of the first-floor plans provides for the Great Hall to run through two stories in height, but in lieu of the usual gallery which in such a case is generally found, "a starching place" is provided with an "Inner Chamber" over the porch, and "Beade Chambers" beyond are shown. Over the kitchen is "The Seconde dininge Chamber," and thence runs a passage round to the main staircase, a great feature being made of "The princepall Closset" overlooking the chapel, with a bow bay to the gallery front. In the alternative first-floor scheme great changes occur. A long gallery, 118 feet in length by 19 feet wide, extends over the offices and kitchen on the left front, while over the hall is a "Greate Chamber" with a "Withdrawing Chamber" between it and the Long Gallery. The Chapel in this plan is made less important by having a "Beade Chamber" over it, and a grand "Lobby" or landing is provided next the main stairs. The circular turrets are treated as very pretty bays opening out of the Long Gallery. The fourth plan is only interesting as showing the "Leads." Space precludes a more detailed description of these plans, which will well repay a close inspection, and entirely warrant the space here devoted to their reproduction.

The collection includes other inner area court plans with circular stair turrets and picturesque contrivances attached, but these do not always, however, suggest provisions for comfortable enjoyment. We have already alluded to the plan of the "offices at Bolsover." It is most neatly drawn, notwithstanding that it hardly agrees with the actual fabric as we know it now. Perhaps this "platforme," as Smithson designates his plans, was not supposed to be taken at one level throughout. A perspective sketch shows a groined marble-faced interior, with a hooded angle fireplace, almost identical with those to be seen in this "offices" building at Bolsover. The dimensions, however, do not tally, otherwise this sketch might have been intended to illustrate the chamber over its entrance, with the "Italian window" and "pergular."

"The platforme of the Stabell at Claytons, Jennaye ye 20th, 1632," is a later work which provided for twenty stalls in a building 105 feet long. The stables at Welbeck are shown 118 feet long, and are much more lofty in elevation than the last, having buttresses between the mullioned windows and pedimented heads to the doorways.

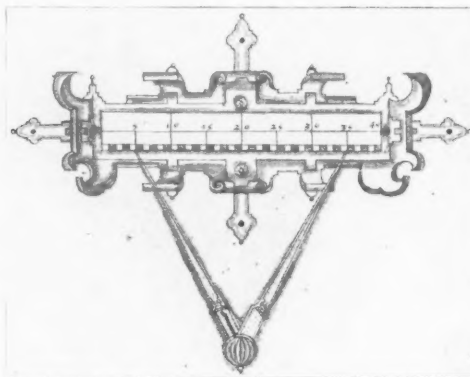
This "upright" is partly in perspective, and the red on the roof, to show the tiles, adds much to its quaintness. The plan and façade, however, do not agree. "The Ridinge house at Welbecke," 120 feet by 40 feet, has a fine hammer-beamed roof over it rather carefully delineated, this roof in the side elevation being set out in perspective in skeleton to allow the purlins and framings to appear. The walls to the plate level are 24 feet high: on this same sheet occurs a diagram intended to set out the contents of a yard of the walling in this Riding house, showing the number of bricks needed per yard. This is curious as a graphic example of early quantity-taking with explanatory notes too copious to reprint without the diagram.

We have made a careful examination of all the other plans, but in the absence of illustrations further descriptions are liable to become uninteresting. A complete set of plans by Smithson for a small detached house should, however, be mentioned. They are most excellent and eminently typical of the self-contained compact style of the early seventeenth century, so characteristic of vernacular country-side dwellings for the yeoman class.

Among the named plans it may be useful, perhaps, to enumerate those of Bullwell Park; "Sur Tho. Vaveyers house at Peterson in Surrie"; "My Lo. of Excetor's ho. at Wymbellton, 1609"; my Lo. Bedfordes at Twitnam (with Lyme Treese and Birche Treese round a circular garden); and "Sur Percevalle Willoughbye's new orcharde at Wollaton Ann. domi. 1618." Another most interesting plan shows the gardens and court of "My Lo. of Wooton House at Nonesuche," having "walkes sett with frute treese."

A somewhat remarkable draft of "The Banketing House at the White Hall in London" seems

to show that Smithson probably made a design in competition with Inigo Jones, whose original plans, now at Worcester College, Oxford, were prepared in 1619. Of course Jones's plans were not carried out save in so far as the Banqueting-house itself was concerned. Smithson's plan before us suggests that a less palatial scheme, not only for the hall itself, but for its immediate adjuncts, must have been contemplated or thought more likely to be adopted with the intention of incorporating existing buildings with it. This is only a conjecture, however, suggested by this plan, which shows a hall, 120 feet long by 43 feet wide, adapted to conform with precincts which are retained. It has four projecting bays towards Whitehall and three interspaced ones looking towards "The Chappell Courte" at the rear. Here there is a large cloister or "close wake wch. goeth to the Loginges." In the middle of this spacious garth, on a raised platform, is drawn "The preaching place" with steps and a verandah or pent to it. On the same sheet is a fragmentary elevation of a rusticated "Fyrste storye of the New Banketinge house," but it does not fit the accompanying Jacobean type of plan at all, and must have belonged to an entirely different scheme, similar but not really like Inigo Jones's design. Among the garden plans is one of additions to "Somerset House" and a "platform" of the gardens to "the Queen's House" with the "Ryver Thames" and "Stayers." Smithson's detail designs for screens and fireplaces, panelings, and other figurements in these drawings show considerable inventive fancy; but some of the mouldings are incongruous and ill-proportioned. A few are inconsequential and look like mere fancy sketches or oddments in design. They illustrate, however, the temperament of the artist, and impress us with his personality.



Scale of drawings reproduced on foregoing pages (excepting the roof plan, p. 370).

